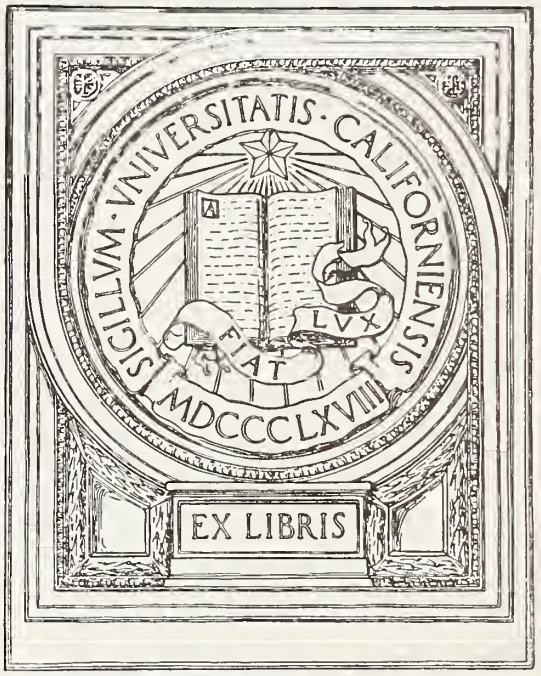
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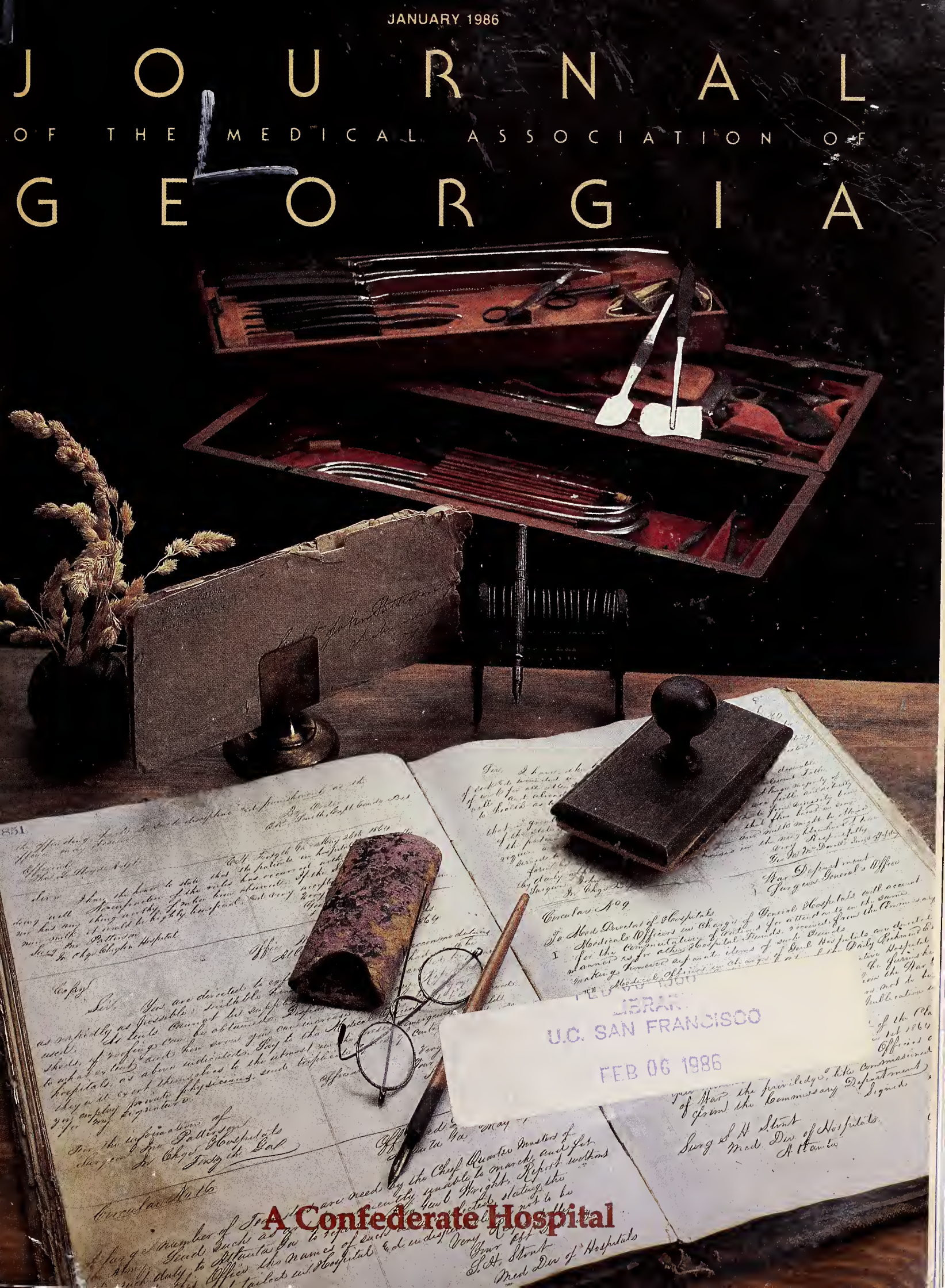
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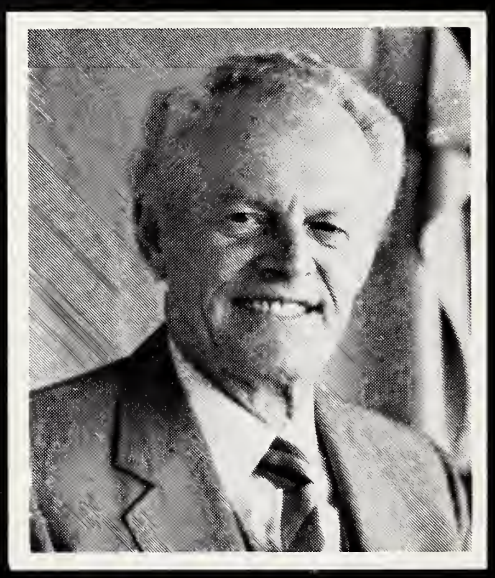


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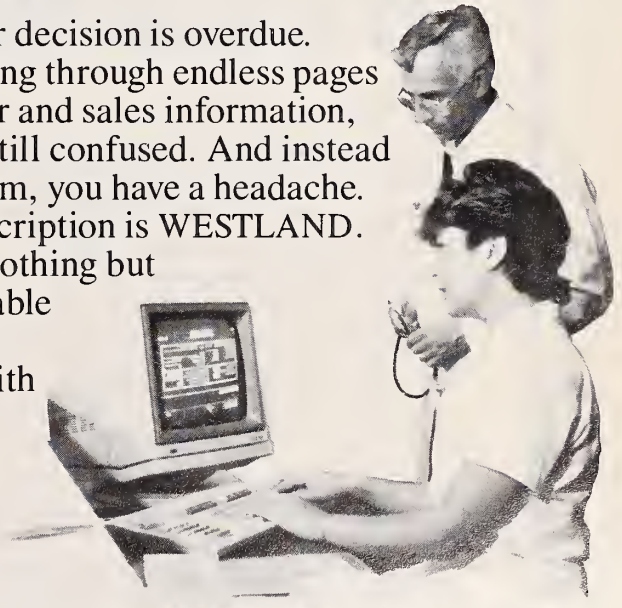
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Preston D. Ellington, M.D., Augusta
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For their kind assistance in helping to prepare our front cover photograph, we wish to thank Josephine Wells of Artlite Office Furniture and Supply Company; Joan Spring of the A. W. Calhoun Medical Library of Emory University; and Larry Semon of Dunwoody, Georgia. Cover photo by Chuck Rogers, of Atlanta.

CALENDAR

JANUARY

24-25—*Atlanta:* **An Introduction to Radial Keratotomy.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Ste. 110, Atlanta 30322. PH:404/727-5695.

25—*Atlanta:* **Ethical Decision-making in Medicine.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

30-31—*Atlanta:* **MKSAP VII, American College of Physicians Review Course.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

FEBRUARY

2-4—*Atlanta:* **MAG Annual Leadership Conference.** Contact Joann MacKenzie or Donna Glass, MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 800-282-0224 (toll free in Ga.).

3-7—*Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

17-21—*Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

22-23—*Augusta:* **Georgia Society of Anesthesiologists.** Category 1 credit. Contact William Hammonds, MD, Secy-Treas., GSA, Emory Univ. Hosp., Dept. of Anesth., 1365 Clifton Rd., Atlanta 30322. PH: 404/321-0111.

26-March 2—*San Juan, PR:* **The Eighth Annual Pediatric Postgraduate Course.** AMA Category 1 credit and AAFP prescribed credits. Contact Judson L. Hawk, Jr., MD, Scottish Rite Children's Hosp., 1001 Johnson Ferry Rd., Atlanta 30363. PH:404/257-2040.

27-28—*Atlanta:* **Sports Nutrition Conference.** Contact Jana Kicklighter, Ph.D., Dept. of Nutrition and Dietetics, Box 873, Univ. Plaza, Ga. State Univ., Atlanta, 30303. PH:404/658-3085.

MARCH

3-8—*Augusta:* **21st Annual Family Practice Symposium.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

8-15—*Copper Mountain, CO:* **XI Annual Snow Job in Gynecology and Obstetrics.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

9-13—*Atlanta:* **American College of Cardiology 35th Annual Scientific Session.** Category 1 credit. Contact ACC, Attn: Meeting Services, 9111 Old Georgetown Rd., Bethesda, MD 20814. PH:301/897-5400.

10-14—*Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

11-16—*Park City, Utah:* **Modern Dissection Techniques of Bone, Biometals and Bioplastics.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

12-13—*Augusta:* **Gynecologic Oncology.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

17-18—*Atlanta:* **Pharmacology for the Anesthesiologist.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

17-21—*Park City, Utah:* **Snowplow Orthopaedics with Special Emphasis on Common Musculoskeletal Pain Problems.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

21-22—*Augusta:* **Flexible Fiberoptic Sigmoidoscopy.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

24-26—*Atlanta:* **Annual Pediatric Postgraduate Course.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

31-April 4—*Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

APRIL

4-5—*Atlanta:* **American Association of Public Health Physicians.** Contact John Dowling, MD, Secy-Treas., Nassau County Health Dept., 240 Old Country Rd., Mineola Long Island, NY 11501. PH:516/535-2260.

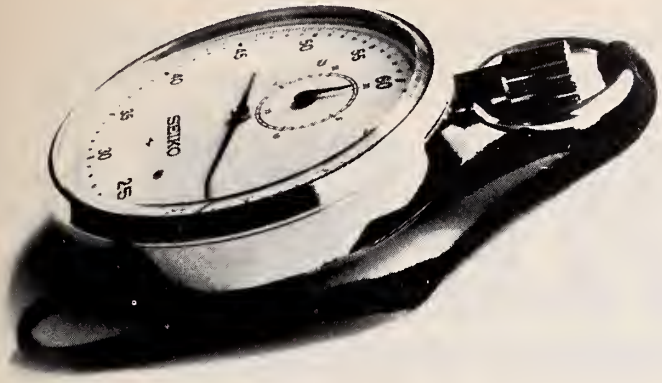
12—*Atlanta:* **Electronic Fetal Monitoring.** Category 1 credit. Contact American College of Obstetricians and Gynecologists, 600 Maryland Ave., SW, Washington, DC 20024. PH:202/638-5577.

19-20—*Atlanta:* **The Cardiac Patient: Management for Cardiopulmonary Bypass.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

19-23—*Sea Island:* **Second Annual Masters in Gynecology.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

21-25—*Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

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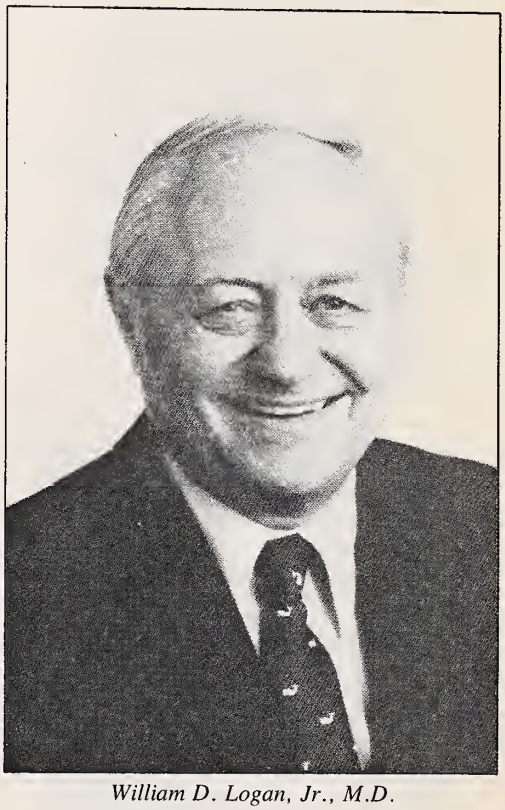
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What I Meant Was...



William D. Logan, Jr., M.D.

Frequently President Reagan is called to task for some remark he has made. For several days afterward, the White House staff and others are busy trying to explain what he meant. On radio and TV, he himself is heard to say, "what I meant was. . . ."

How many times do we say this in our work and everyday lives? Numerous anecdotes and experiences come to mind. Remember the one about two psychiatrists passing another who said "good morning?" After nodding and continuing on their way, one said to the other, "I wonder what the so-and-so meant by that?"

Then there is the story of a little lady with a pacemaker who appeared in the emergency room with a broken arm sustained in a fall at home. She had heard she shouldn't get close to a light switch with a pacemaker and had been stumbling around at home in the dark for several months. Simple assurance from the doctor straightened this out.

Another incident I remember well occurred when trying to answer a wife's question regarding whether or not her husband had emphysema. After several minutes of explaining some normal increasing stiffness in the lungs, as in joints with age, I asked if they understood. She looked at me and said, "I think so doctor . . . you are trying to tell me my husband has arthritis." "No lady, what I meant was . . . !"

It is somewhat amazing in this world of super communications and information that so much confusion exists. Reportedly the biggest factor in medical malpractice suits is misunderstanding and lack of communication. We should all work to improve this. ***Remember, it's better to talk more to your patients so as to spend less time talking to lawyers.***

"Yes, dear? I'm working on my President's Page. No dear, I didn't complain about having meatloaf two nights in a row. What I meant was. . . ."

Sincerely,

Wm. D Logan Jr.

MAG Legislative Positions: Grounded in the Public Interest



James A. Kaufman, M.D.
Chairman
MAG Council on Legislation

THERE WAS a screech of brakes followed by a loud crash. A 23-year-old man on a motorcycle lay by the side of the road. A Grady ambulance was summoned, and the attendant gave the man an initial check. His helmet was found cracked almost in half. The man told the attendant: "You know, I was riding my bike at 105 m.p.h." On the way to Grady, he complained of a bad headache. At the emergency room, he was given a more thorough examination, and the doctors determined that a severe headache and a cracked helmet appeared to be the only results of a direct blow to the head at a speed of 105 m.p.h.

I know this is a true story because my son was the ambulance attendant.

Can you imagine what would have happened had the man not been wearing a helmet? His head would have been cracked — not the helmet. Yet, incredibly, an effort is being made to have the Georgia General Assembly repeal the state's mandatory helmet law.

The Helmet Law

The Medical Association of Georgia is leading the fight against repeal of the helmet law. MAG has taken this position not for its own benefit or the benefit of its members but for the protection of the public.

Dr. William W. Moore, Jr., of Atlanta, was one of the physicians who testified at last year's session against repeal of the law. He was asked by a member of the committee considering the legislation: "Doctor Moore, are you not a neurosurgeon? Is it not true that all serious head injuries are treated by neurosurgeons? Are you not speaking against your own self interest?"

Of course, Dr. Moore was not speaking in his own self interest — or in the self interest of his fellow physicians. He was speaking in the interest of the people of Georgia.

So it is with the bulk of the legislation that the Medical Association of Georgia favors or opposes. Our positions are taken in the public interest, not in our own private interest.

The 1986 session of the Georgia General Assembly, which will meet from early January through March, will consider many bills of interest and concern to physicians and patients and on which MAG has taken a position.

Tort Reform

Tort reform is foremost among these and is an issue very much in the public interest. This subject was discussed in detail in the November, 1985, issue of the MAG *Journal* in an excellent and perceptive article by our



general counsel, David B. Poythress. The subject will not be further examined here. Members of MAG know only too well of the far reaching impact that the liability question is having on the practice of medicine and health care in Georgia and the nation.

But we must not forget there are other issues that the Medical Association of Georgia is concerned about and which will be considered during the 1986 legislative session.

Composite State Board of Medical Examiners

For example, there is a need for strengthening the Composite State Board of Medical Examiners in order that it may be even better armed to remove from practice any physician who does not meet the highest standards of our profession. This Board already does an excellent job, and with additional support could become even more effective. The strictness exercised by the Composite Board results in the disciplining of more licensees than all the other 57 regulatory boards in this state combined.

Indigent Care

MAG also is vitally interested in indigent care for Georgia citizens. But we are opposed to having their care paid for by the institution of a "sick tax" on other hospital patients, as has been suggested. If we are to provide for indigent care through the imposition of some special tax or fee, why not levy an additional tax on alcohol, which is responsible for so many hospital admissions?

Other Health Care Practitioners

In another area of public interest, we are not opposed to other health care practitioners exercising their professional duties within the limits of their training and qualifications. But we are opposed to any group of practitioners reaching beyond their area of expertise through legislation rather than through education.

Drug Sampling

MAG also favors stricter control over drug sampling. However, we do not believe that dispensing of drug samples to physicians should be eliminated entirely, because this often is helpful to both doctor and patient.

Cost Containment Commission

Anyone familiar with health care today knows that the medical profession has taken the lead in cost containment through peer review and utilization mechanisms. But we are opposed to any proposal to create a special Cost Containment Commission to function in a manner akin to the Public Service Commission to review and regulate rates charged by hospitals, as if they were public utilities. In the 11 states where such commissions have been established, only one has been able to show even minimal cost reductions. And any rate regulation is bound to be of itself costly and bureaucratic. For example,

Can you imagine the hundreds of hospitals in Georgia applying to the Cost Containment Commission every time they wanted to change one of their many rates?

it costs a public utility from five hundred thousand to a million dollars in legal fees and months of work to effect a rate change for the service it provides the public, and these costs are eventually passed on to utility customers. Can you imagine the hundreds of hospitals in Georgia applying to the Commission every time they wanted to change one of their many rates?

Confidentiality of Psychiatric Records

We would also like to call your attention to the fact that the current law which provides special confidentiality to psychiatric records should not be changed. Were this confidentiality to be removed, we are concerned that many patients in need of psychiatric treatment would not seek it if they feared that any Tom, Dick, and Harry might gain access to what they discussed with the psychiatrist.

Delegation of Medical Acts

On another question that might be considered at this year's legislative session, we believe physicians should be able to continue to delegate certain medical acts so long as those acts are done under their direct supervision and with them assuming full liability. We feel this not only contributes to health care cost containment, but promotes better health care as well.

We believe physicians should be able to continue to delegate certain medical acts so long as those acts are done under their direct supervision and with them assuming full liability.

These are just a few of the legislative issues of concern to physicians and the public that, in addition to tort reform, may be discussed, debated, and acted upon at the 1986 session of the Georgia General Assembly.

We need each and every member to become personally involved with members of the House and Senate on issues that involve the public's health. If you have not already learned so, you will find that the members of the Legislature are by and large a great and dedicated group of people. They need our guidance and help, not only during the session but also all year long.

IF YOU DIAGNOSE ARTHRITIS

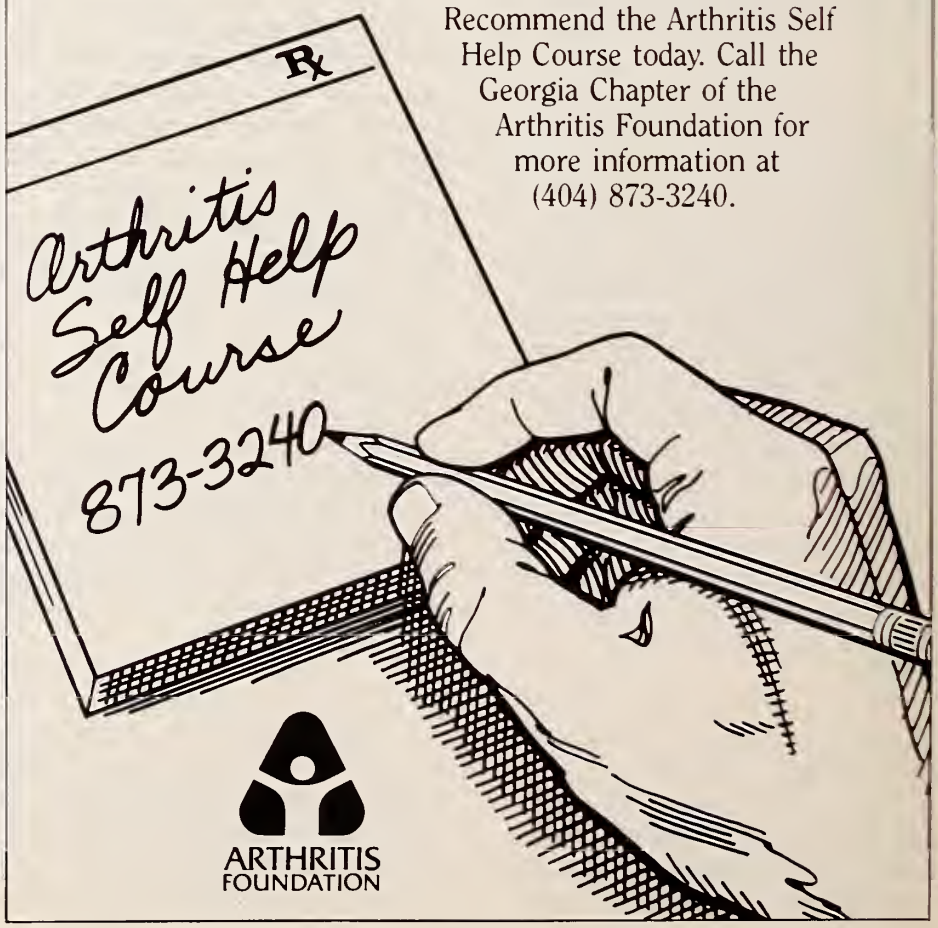
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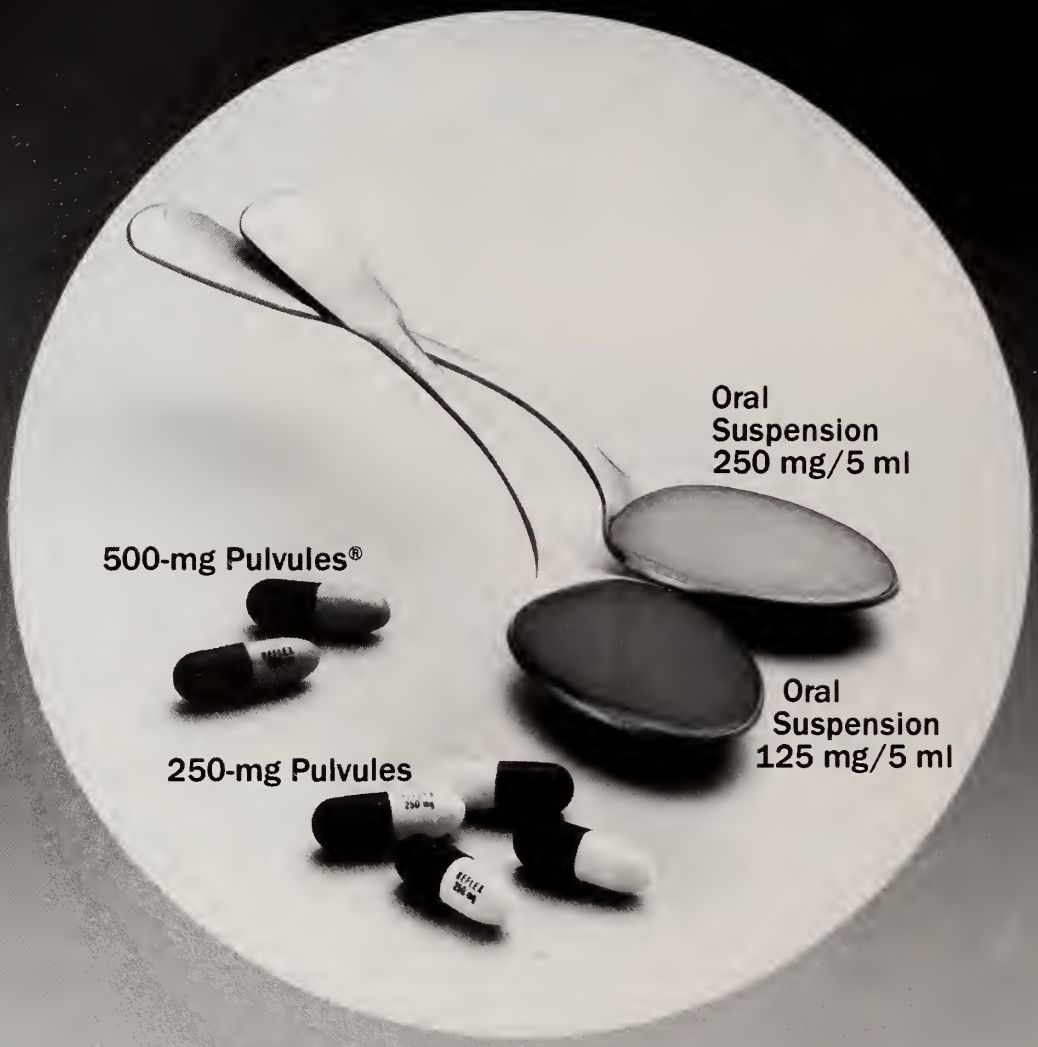
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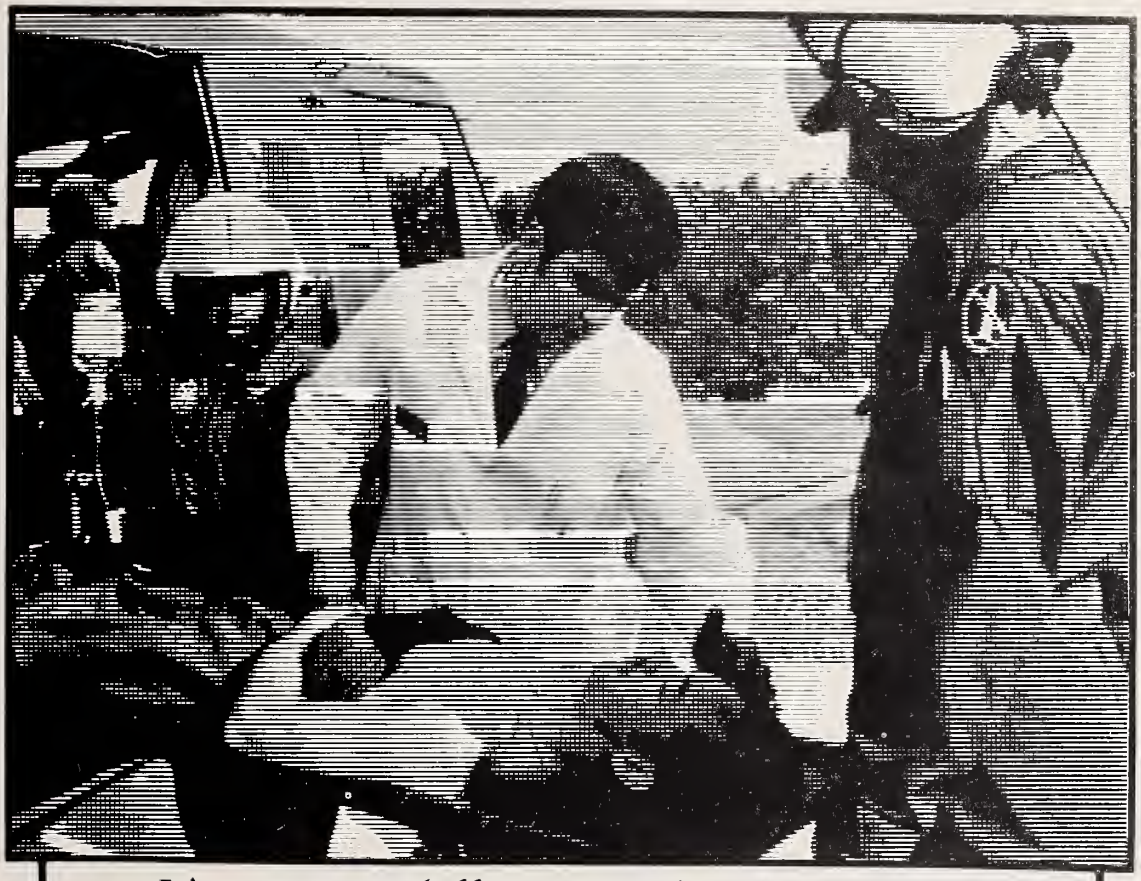
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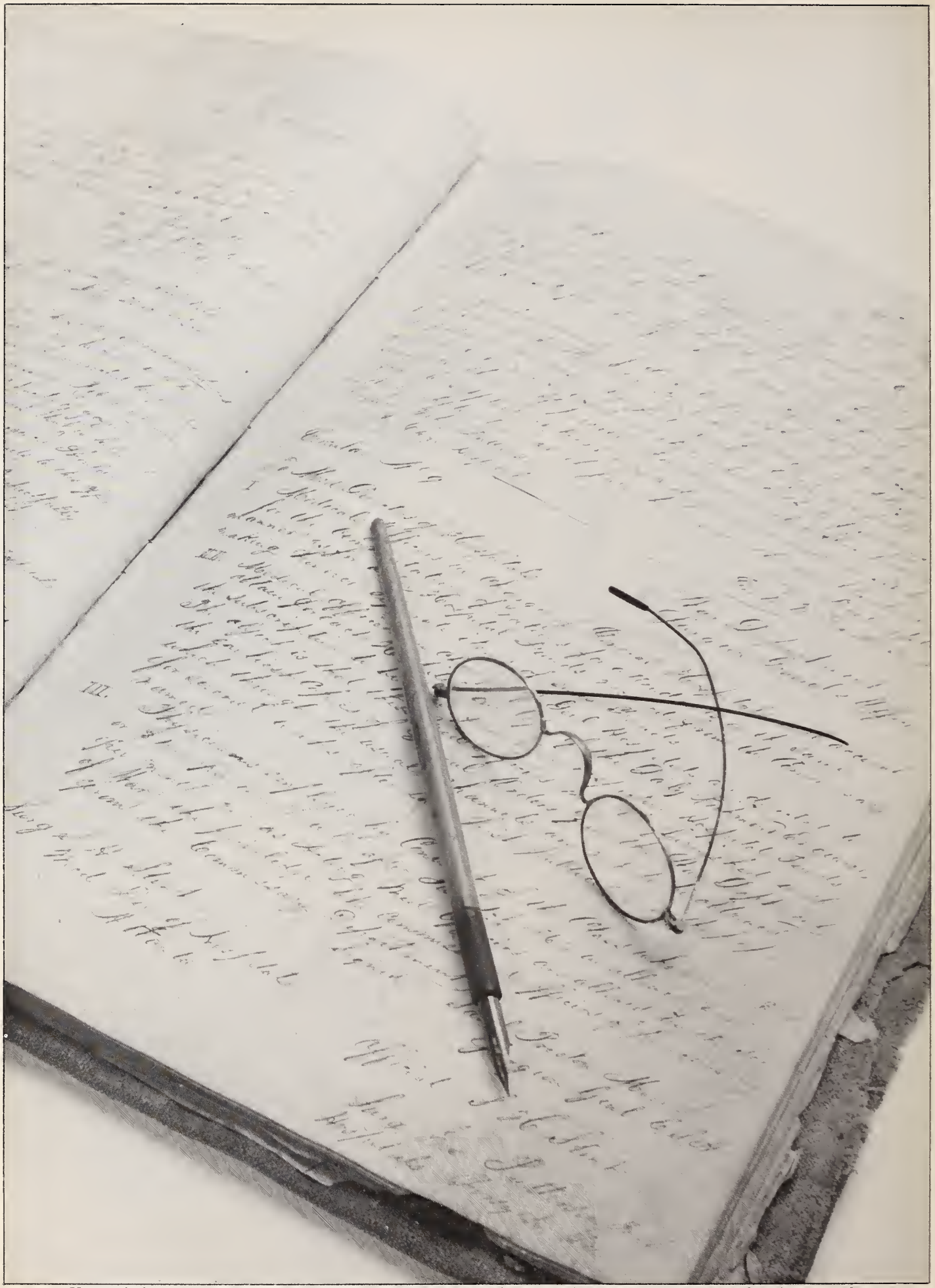


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Hospital clerks hand-copied important documents into the Clayton Order and Letter Bank. Its fragile pages thus preserve an invaluable record of Confederate medical care during the Atlanta Campaign.

A Confederate Hospital

Surgeon John Patterson and The Clayton During The Atlanta Campaign, 1864

BY STEPHEN DAVIS

In the spring of 1864, as he set out to capture Atlanta, Union General William T. Sherman massed nearly 100,000 soldiers in his three armies. Arrayed against them was a Confederate force, General Joseph E. Johnston's Army of Tennessee, that numbered some 50,000 men. The Federals' numerical strength, a two-to-one advantage, shaped each commander's strategy throughout the campaign, and did much to determine its outcome.

Throughout this contest of numbers, Confederate hospitals serving Johnston's army held the critical responsibility of healing every sick or wounded soldier and returning him to the ranks as quickly as possible. During July, intense fighting around Atlanta and unrelenting infectious diseases led to the hospitalization of 24,384 Southern soldiers. In the following month, another 21,948 cases were admitted — a figure representing nearly half of the Confederate army's effective strength. Of these patients, surgeons were able to return only 20% to the front. That they limited mortality to 2% reflects well on their life-saving work, especially among soldiers weakened by heat, exposure, and chronic sickness. But the fact that three out of every four soldiers were kept in the hospital, sent to another one, or sent home indicates the magnitude of the Confederates' medical problems and the inadequacies of their medical care.[1]

The difficulties and achievements of Confederate hospitals during the Atlanta Campaign are dramatically shown in their manuscript records, especially Order and Letter Books, in which surgeons recorded their daily reports, medical circulars, orders from headquarters, and other important correspondence. One such Order and Letter Book, that of Clayton Hospital in Forsyth, Georgia, has recently come to light. The book is in the possession of Mrs. Marcie B. Turk, wife of Atlanta thoracic surgeon L. Newton Turk, III, M.D., and maternal great-granddaughter of Confederate Surgeon John Patterson. Dr. Patterson took charge of Clayton Hospital in January, 1864, and supervised its work until the end of the war. He was esteemed by his colleagues as both a competent physician and effective administrator.

A native Tennesseean, Dr. John Patterson was 39 years old, married, and raising two children in Murfreesboro when the Civil War broke out in April of 1861. On May 20, he enrolled as private in

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Dr. Davis is Associate Editor and Book Review Editor for *Blue and Gray*, the Civil War buff's magazine. He serves on the editorial board of the *Atlanta Historical Journal*, published by the Atlanta Historical Society, and has authored approximately four dozen articles on Civil War history. Dr. Davis also serves on the MAG staff as Director of Education.

“By the autumn of 1863, Dr. Samuel H. Stout, hospital director for the Army of Tennessee, had established an impressive 7000-bed network of military hospitals throughout Georgia. . . .”

Company C of the 18th Tennessee Infantry Regiment. In early September, he was appointed surgeon of the regiment and served with it in western Kentucky and Tennessee. Patterson's regiment was part of the garrison of Fort Donelson, Tennessee, when Union forces captured it on February 16, 1862. The record is unclear regarding Dr. Patterson's parole or imprisonment. During the first year of the war, captured surgeons were treated as ordinary prisoners and as such were confined until exchanged. Patterson may have therefore been among the men of the 18th Tennessee who, after 7 months in Northern prisons, were released in September 1862.[2]

On January 1, 1863, Dr. Patterson was assigned to the Confederate hospital department. In Chattanooga, he worked in several army hospitals, assuming temporary charge of Newsom and Foard Hospitals during the spring. Throughout July and August he directed the "Pest House" (smallpox hospital). Then the Confederate evacuation of Chattanooga, in early September, forced the removal of the city's hospitals and their relocation in Marietta. Surgeon Patterson went with them.

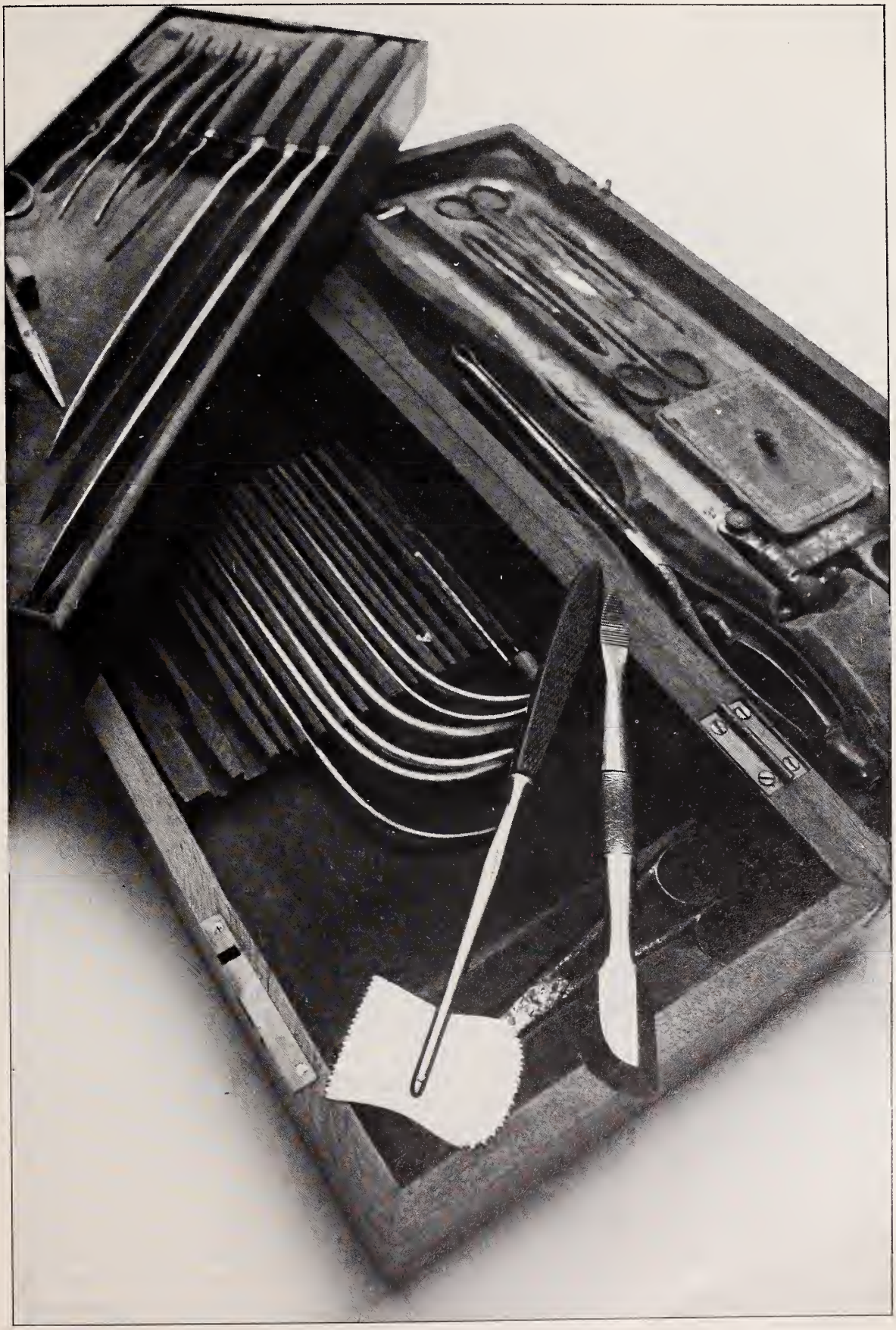
By the autumn of 1863, Dr. Samuel H. Stout, hospital director for the Army of Tennessee, had established an impressive 7000-bed network of military hospitals throughout Georgia, from Dalton, Kingston, and Rome to LaGrange, Griffin, and Forsyth. At the latter place was "General Hospital No. 1." Previously located at Tunnel Hill in northern Georgia, the facility was transferred southward during September and reestablished at Forsyth. Quartered in four houses in the center of town, the hospital soon became known as the "Clayton Hospital," possibly in honor of Confederate Surgeon H. H. Clayton. Dr. J. B. Barnette directed the Clayton, which, along with the "Hardee," were the first two Confederate hospitals established in Forsyth.

Patterson, supervising the Foard Hospital in Marietta, expressed interest in moving to Forsyth and assuming command of one of the hospitals there. He apparently was held in such high regard by Dr. Stout that his request was soon granted. Dr. Barnette was transferred to Marietta, and John Patterson succeeded him as surgeon in charge of Clayton Hospital on January 13, 1864.[3]

One of Barnette's last acts in Forsyth was to prepare a quarterly Sanitary Report, which tells much about Clayton Hospital and its patients. On the first of January, it had a capacity of 250 beds, to which another 50 or 60 were soon to be added with acquisition of a fifth house in town. Dr. Barnette reported that many of his patients arrived from the front with "spongy gums and other evidences of scurvy," but that this condition had been combatted thanks to a supply of vegetables purchased locally.

More serious problems were posed by diarrhea and gangrene. Without any knowledge of the microbes causing gastrointestinal infection, Civil War surgeons were unable to prevent "camp diarrhoea," which killed thousands of soldiers on both sides. By prescribing sound diet, however, Surgeon Barnette reported success in managing the disease, "except in those cases where the constitutions were viciated [sic] and broken down by bad alimentation long standing disease and exposure incident to camp life. Among this class of patients the disease has been very unmanageable and generally fatal." Barnette and his assistants were even less effective in controlling postoperative infections. In what appears today as remarkable ignorance of the bacteria which complicated virtually every case of gunshot wound, Barnette explained how gangrene spread among the wounded patients at Clayton:

> *The first cases . . . we had in this hospital were in three Soldiers sent here from Griffin, Ga. when I learned the disease*



By the time they arrived in the Clayton Hospital, Forsyth, most wounded Confederates had already undergone primary surgery. This Confederate surgeon's instrument kit is on display at the Calhoun Medical Library of Emory University.

was prevailing at the time. Their wounds were slight and almost healed but several days after their admission they were all on the same day attacked by gangrenous sloughs. Some days later several other similar cases appeared in the ward — apparently the result of contagion propagated through atmospheric medium and not dependant [sic] on any vitiated state of the system for it attacked indiscriminately the bad and the good constitution — the feeble and the strong. The evidence whilst it may not be of itself conclusive is quite satisfactory to my mind that the disease was transported from Griffin to this Hospital through the agency of these three Soldiers and then spread by reason of its contagious properties.[4]

The quarterly Sanitary Report was just a small part of the paperwork facing Surgeon Patterson as he became medical officer in charge of Clayton Hospital. There were daily morning reports; lists of patients received, discharged, furloughed, died, or returned to command; weekly accounts of hospital finances and property; monthly reports of sick and wounded, interesting surgical cases, lists of medical officers, stewards, and soldiers working in the hospital, and more.[5] Most of these papers Patterson forwarded to his superiors — the surgeon in charge at Forsyth, the army's Medical Director of Hospitals (Dr. Stout), and the Surgeon-General in Richmond. On assuming command at the Clayton, Patterson began the practice of having a clerk copy into the hospital Order and Letter Book each Daily Morning Report made by a medical officer. It is these documents which fill much of the fragile, canvas-wrapped artifact in Mrs. Turk's possession, and which tell us today about what happened at this Confederate hospital during the Atlanta Campaign.

By early spring of 1864, when Clayton's 300 beds were spread through five buildings in town, Patterson had three other surgeons assisting him as medical officers. One of these made a daily tour of the hospital, then filed a brief survey of his findings. Throughout these morning reports there is repeated concern for the cleanliness of the facility. Unaware of the germs that pervaded their hospital, surgeons at the Clayton were nevertheless quite mindful of gross sanitation. After his morning inspection one day in late January, 1864, Assistant Surgeon J. H. Brack found the wards "in good condition, bedding clean and nice," but suggested that "the dining room be floored with plank, as it is very difficult to keep a dirt floor nice and neat." Hospital floors were periodically scrubbed, then sprinkled with white sand. A wash-house routinely laundered the soldiers' clothing, bandages, bunk padding, and bedsheets. And from time to time Dr. Patterson's colleagues emphasized the need for patients to bathe. Surgeon J. E. Pearson, for instance, invoked Napoleon's adage that "soup makes the soldier, soap makes the gentleman" to reinforce his point on the importance of "personal ablution" for good health.

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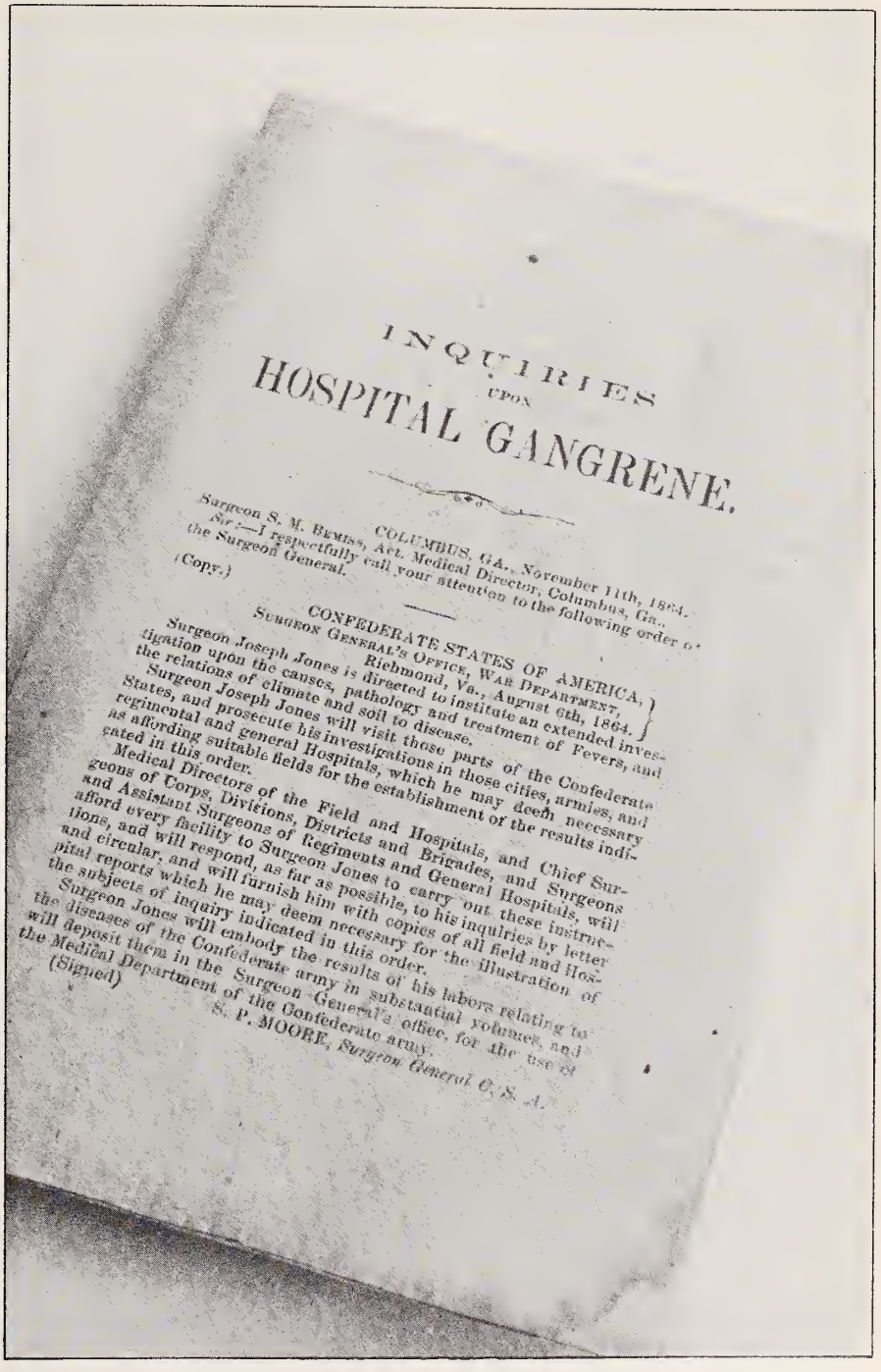
While Clayton Hospital was doubtless judged clean and tidy by standards of the day, Patterson's officers reported occasional lapses of sanitation that would shock the modern hospital administrator. From time to time, attention was called to the filthy grounds around the hospital kitchen, from whose windows slops were thrown. A pigsty at the back of the officers' ward was reported in January as "a nuisance which ought to be abated." It was apparently not removed, however. The sty's fencing eventually broke and in late July, with the hospital filled with wounded from the battles around Atlanta, hogs rooted and slept under the hospital flooring. Until boards and a carpenter were procured to make the repairs, Patterson's assistants complained of the "unpleasant and unhealthy odor" distressing their patients. Worse still was the proximity of the hospital wards to the open-ditch latrines, or "sinks" used by the patients. Medical officers regularly reported the need for lime or other deodorizers, and for new sinks to be dug. On July 10, 1864, Assistant Surgeon J. S. Stephenson recommended covering or relocating the pit near one ward, as "the effluvia arising from it is extremely offensive and may prove detrimental to good." Soldiers' inattention to hygiene further complicated these sanitary problems. At one point a surgeon recommended placing a guard at certain wards "to confine the patients to the sinks and prevent them from rendering filthy and offensive the grounds adjacent."[6]

In addition to sanitation, diet was a concern at Clayton. For his patients, Surgeon Patterson procured rations from the Subsistence Department, and used a special hospital fund to buy poultry, vegetables, and other perishables from local citizens. In April, he reported his satisfaction that "the great staples of life have been had

in ample quantities and of good qualities.'' An 8-acre garden produced additional stores of corn, potatoes, peas, beans and other vegetables.

Despite these efforts, however, food supplies occasionally proved inadequate, especially when the sick and wounded crowded the hospital during the summer. Patients grumbled of insufficient or poorly prepared meals while convalescents pestered the residents of Forsyth with requests for food. Patterson's medical officers heard these complaints at their morning inspections and found that some of them were merited. Bread prepared by the hospital bakery was a frequent target of criticism. ''There is universal complaint of the bread, both as to the material and mode of preparation,'' reported Surgeon J. E. Pearson in March. ''I have no idea that such bread can be eaten with impunity by well men, much less by the sick, who are so often complaining of derangements of the bowels. A remedy to this state of things should be sought for, and the evil stop'd.'' Other officers at times found the syrup to be sour or the rice sandy. After his inspection tour of July 28, Dr. W. B. Stephens recorded that ''the inmates of Ward 'A' complain that the chicken sent them this morning was pretty much stripped of flesh.''[7]

The availability of medicinal liquors also posed problems for Dr. Patterson and his colleagues. Assistant Surgeon Brack lodged a complaint: ''I would respectfully state that there is too much whiskey drank [sic] at the drug store by persons who do not come under the head of sick men. I do not object to a drink occasionally, but I do protest against the misuse of whiskey. . . . ''
One night in April, when the attending surgeon was absent, convalescents in one ward got hold of some liquor and, as was reported the next day, ''behaved very badly.'' A few weeks later, Surgeon George M. McDowell investigated the problem and found



INQUIRIES
UPON
HOSPITAL GANGRENE.

Surgeon S. M. Bemiss, Act. Medical Director, Columbus, Ga.,
Sir:—I respectfully call your attention to the following order of the Surgeon General.
(Copy.)

COLUMBUS, GA., November 11th, 1864.

CONFEDERATE STATES OF AMERICA,
SURGEON GENERAL'S OFFICE, WAR DEPARTMENT,
Richmond, Va., August 6th, 1864.

Surgeon Joseph Jones is directed to institute an extended investigation upon the causes, pathology and treatment of Fevers, and the relations of climate and soil to disease.
Surgeon Joseph Jones will visit those parts of the Confederate States, and prosecute his investigations in those cities, armies, and regimental and general Hospitals, which he may deem necessary as affording suitable fields for the establishment of the results indicated in this order.
Medical Directors of the Field and Hospitals, and Chief Surgeons of Corps, Divisions, Districts and Brigades, and Surgeons and Assistant Surgeons of Regiments and General Hospitals, will afford every facility to Surgeon Jones to carry out these instructions, and will respond, as far as possible, to his inquiries by letter and circular, and will furnish him with copies of all field and hospital reports which he may deem necessary for the illustration of the subjects of inquiry indicated in this order.
Surgeon Jones will embody the results of his labors relating to the diseases of the Confederate army in substantial volumes, and will deposit them in the Surgeon General's office, for the use of the Medical Department of the Confederate army.
(Signed)
S. P. MOORE, Surgeon General C. S. A.

HOSPITAL GANGRENE — In November, 1864, Dr. Joseph Jones of Augusta, Georgia, circulated an eight-page questionnaire to Confederate surgeons, soliciting their comments on the origin and observable symptoms of gangrene — which infected nearly every wound during the war. This is Dr. Patterson's copy of the leaflet, preserved among the papers in Mrs. Turk's possession.

that patients were obtaining whiskey with forged prescriptions. His recommended solution was that in the future, any convalescent charged with unauthorized imbibing should ''be sent immediately to the front.'' The threat of this penalty apparently worked, for the Clayton letter book contains no further mention of the liquor problem.[8]

The Confederate Medical Department authorized hospitals such as the Clayton to retain a staff of one surgeon for every 70 or 80 patients. Assisting the medical officers were a number of matrons — women charged with seeing that patients' food was properly

prepared, beds and clothing laundered, and medicines administered. The ladies of Forsyth who served in this capacity received repeated compliments from the hospital medical officers. In addition, slaves were hired as cooks, laundresses, or other workers. A very important part of the staff at Clayton were soldiers deemed medically unfit for field duty, but who could assume the work of nurses or ward masters. Surgeons in charge of hospitals were continually reminded that these convalescents should only serve until they were well enough to be returned to their commands. Typical of these orders was the one Surgeon Patterson received in February 1864: "All patients in hospitals will be returned to duty as soon as their health is restored. Under no circumstances will they be employed in hospital service when found able for duty in the field."

"A pigsty at the back of the officers' ward was reported as 'a nuisance which ought to be abated.' The sty's fencing eventually broke, and with the hospital filled with wounded from the battles around Atlanta, hogs rooted and slept under the hospital flooring."

Dr. Patterson's use of a patient as hospital clerk created a controversy in the spring of 1864 that came to the attention of even General Johnston, the army commander. At the center of the dispute was Private Edward L. Davezac of Company A, 2d Kentucky Infantry Regiment, who was hospitalized for chronic diarrhea. After medical examination, Davezac was found capable of light hospital work while under treatment. Patterson accordingly detailed him as a clerk on March 17.

When the women of Forsyth proposed to raise money for Clayton Hospital by performing a series of light plays, Davezac volunteered to help. Unfortunately, the promotional handbill for one of the dramas, "All's Fair in Love and War," came into the possession of Davezac's commanding officer, Captain H. F. Lester. The captain, assuming that "some surgeon" was detaining Davezac, forwarded the bill to his superiors with his request that the private "be returned to duty with his company immediately," The paper went up through channels. Major General William B. Bate, amused at the circumstances, added his endorsement: "I protest that 'all is not fair in Love and War' — Else this man would be on the 'Front.' He had done the 'love' part in Forsyth — we want the 'war' part of his drama acted on 'front'. . . . " Captain Lester's request was approved by General Johnston, who directed Surgeon Patterson to return Davezac to his unit.

Patterson resented the implication that he had held back an able-bodied man from field duty. He vented his anger in a long letter, dated April 6, in which he explained Davezac's illness and affirmed the reasons that the private had been judged medically disabled. Patterson was particularly indignant at Captain Lester's presumptuous challenge of a surgeon's authority. In his defense of medical officers, he subtly chided the generals who had endorsed Lester's letter:

> *Crippled, overrode [sic] and disregarded in their opinions and decisions in the legitimate line of their duties, how insignificant and inefficient are or may become, the ends and efforts of Medical Officers! Is a captain in the field, I would respectfully ask, to be permitted to charge broadly, yet flippantly "some surgeon" with gross assumption of authority and violation of army regulations upon mere hearsay and rumor, and his broadcast "respectfully approved and forwarded" the whole length of the line to the Genl Comdg Army? If consistent with the public good — if there be really difficulty in defining the rights, duties and status of Medical Officers, I would respectfully ask that the papers be referred to Surgeon Genl Moore for consideration and advisement.*
>
> *John Patterson*
> *Surgeon in charge*

"Dr. Patterson's use of a patient as hospital clerk created a controversy in the spring of 1864 that came to the attention of even General Johnston, the army commander."

Patterson's protest made its way back up the ranks to General Johnston, who resented the surgeon's language. Johnston returned it, adding, "Surgeon Patterson will be required to modify the within communication, so as to make it respectful and becoming." Patterson in turn bristled at this rebuff, but complied. Under date of April 14, 1864, he asked that his previous communication be expunged from the official records. And there the controversy ended.[9]

The start of Sherman's advance on Atlanta in early May, 1864,

found Clayton Hospital with a large number of vacant beds, and the surgeons and nurses comparatively idle. Then the fighting started, with the campaign's first big battle at Resaca, May 14. Within another 10 days, almost all the Clayton's 300 beds were filled with patients.

The transport by train of wounded soldiers to hospitals 100 miles in the rear created medical problems for surgeons at Forsyth. Dr. McDowell reported on May 24 that all patients at the Clayton were doing well, except for two or three, "whose condition was such as should have prevented their transportation to so great a distance from the front." McDowell complained further that "two lives have been sacrificed within the last week by this injudicious practice of sending very sick persons in crowded cars through heat and dust to distant Hosptls, [sic] when it is understood there is yet room in the Hosptls nearer the army." Later, Dr. J. A. Winkler also protested that "several patients have been brought into this Hospital in a dying condition. Humanity demands that such cases should not be moved."

The sudden increase of sick and wounded soldiers in the army caused Surgeon Stout to order an expansion of hospital facilities in Georgia. Patterson received his orders on May 25: "You are directed to extend your Hospital accommodations as rapidly as possible: suitable houses, if they can be had, will be used. As tents cannot be supplied, you may have erected temporary sheds, if roofing can be obtained. Dispatch is necessary." Within a few weeks Patterson had acquired the use of the three-story Monroe Female College, located east of town near the railroad. Bunks and clothing were a while yet in arriving, and the loss of the building's cupola in a rainstorm added further discomfort to the patients inside. As late as June 30, most of the sick and wounded still lay on the floors of the college building. But by July 11, bunks and hospital clothes had arrived for the college wards, which brought Clayton's capacity to 500 beds. Even more were added later when wooden sheds were built in front of the Southern Botanico-Medical College. By mid-August, John Patterson was in charge of a nearly 700-bed hospital.[10]

"The start of Sherman's advance on Atlanta in early May, 1864, found Clayton Hospital with a large number of vacant beds. . . . Within 10 days, almost all the Clayton's 300 beds were filled with patients."

Forsyth eventually became a major Confederate hospital center in the state. As a result of the gradual Confederate withdrawal from north Georgia, hospitals were relocated at points south of Atlanta. By July 16, three hospitals formerly situated at Marietta (the Academy, Gilmer, and Foard) had been established just outside of Forsyth. An additional "tent hospital," named for Surgeon Stout, was set up a mile south of town at Smyrna Church. By late July, a seventh facility, the McFerrin Hospital, was being established with eight wooden sheds, 100 feet long and 18 feet wide, built on the campground eight miles below Forsyth. The capacity of all these various hospitals probably numbered at least 2500 beds.[11]

There was no shortage of cases to fill them. Of diseases treated at the Clayton, Patterson noted that the principal ones were diarrhea, dysentery and scurvy. "The scorbutic element," he wrote on July 3, "is the preponderating one in a large class of the patients sent us, the inevitable sequence of the almost total deprivation of vegetables in the field service of the past few months." The number of wounded markedly increased after the severe fighting around Atlanta on July 20, 22, and 28. Clayton Hospital was soon quite crowded with these men. Patterson's assistants called for more beds, clothing, bandages and other equipment. Shortage of vegetables caused repeated complaints. Through this crisis, however, the surgeons at Clayton managed fairly well. Patterson noted that gangrene cases among the wounded were responding to treatment. Surgeon Alex Marshall on August 6 observed that "our sick and wounded are doing remarkably well considering the warm season is still upon us," though he acknowledged that "we have a few deaths occurring in the Hosptl."[12]

Statistical reports indicate the number and types of cases treated at Clayton Hospital during July and August, 1864 (Table 1). On July 1, Patterson and his staff were treating 392 patients, of whom 357 were listed as sick and 35 as wounded. During the month, 373 new cases were taken in, while 227 men were returned to duty, sent to another hospital, or furloughed. Only five patients died. At the start of August, 533 men were being treated in the crowded facility. As in July, the number of sick cases exceeded that of the wounded. Moreover, of the 11 deaths reported at Clayton during August, eight were attributed to disease rather than to wounds.

During these 2 months, a half dozen diseases accounted for much of the new sickness treated at Clayton Hospital. It is indicative of the undisciplined manner of Civil War diagnosis that "debilitas" (general weakness) was listed as the principal ailment of 64 soldiers. Chronic or acute diarrhea was listed as the most pervasive specific illness at the Clayton, representing some 59 cases during July and



Surgeon John Patterson is pictured here in uniform; his commission as Surgeon of the 18th Tennessee Infantry Regiment dates from September 11, 1861. After the war, Patterson retired to Auburndale, Florida, where he was photographed while fishing in his boat (courtesy of Mrs. L. Newton Turk).

Table 1: Report of Sick and Wounded at Clayton Hospital July-August 1864

	July	
In hospital at start of month		392
Sick	357	
Wounded	35	
Cases taken in during month		373
	Commissioned Officers	*Enlisted Men*
Sick	30	201
Wounded	22	120
	52	321
Returned to duty, sent to general hospital, furloughed or deserted		227
Died		5
	Officers	*Men*
Sick	1	2
Wounded	1	1
	2	3
Remaining		533
	August	
In hospital at start of month		533
Sick	322	
Wounded	211	
Cases taken in during month		138
	Commissioned Officers	*Enlisted Men*
Sick	8	81
Wounded	13	36
	21	117
Returned to duty, sent to general hospital, furloughed or deserted		210
Died		11
	Officers	*Men*
Sick	0	8
Wounded	1	2
	1	10
Remaining		450
Sick	312	
Wounded	138	

August. Moreover, during these two months, chronic diarrhea claimed the lives of eight officers and men — out of a total of 11 deaths attributed to all diseases. Acute rheumatism hospitalized 26 soldiers in August, when rainy weather aggravated the complaints of men already weakened by exposure. Seven Confederates were admitted during the month for pneumonia; three eventually died. An additional 16 cases of pleuritis were treated in July. In the 2 months, "febris remittens biliosa" — bilious remittent fever, a classification used for malaria — hospitalized 21 more soldiers at the Clayton. A variety of other ailments, such as laryngitis, acute bronchitis, various fevers, and gastrointestinal ills, accounted for the other cases of disease reported at Patterson's hospital.[13]

During July and August surgeons at Clayton also treated nearly 200 patients with gunshot wounds; of these five died. This low mortality reflects the hospital's location well behind the front lines. Most seriously injured Confederate soldiers were operated on in Atlanta and sent farther south only later. As a result, Dr. Patterson observed that "the cases before reaching this Post have usually undergone all the active surgical interference requisite. The removal of a carious, necrosed, or fragmentary bone an impacted ball &c &c constitute about all the surgery at this post."

One wounded Confederate who died at Forsyth was James I. Darter, Orderly Sergeant of Company C, 24th Texas Cavalry. He was 20 years old when he was wounded in the fighting at Atlanta, July 21, 1864. After removal to Forsyth, his recovery took a turn for the worse, as a fellow soldier wrote Darter's father:

Camp 24 Texas Regiment,
September 15, 1864

Mr. Darter
Dear Sir:

It is with much regret that I communicate to you the death of your son, James I. Darter. James was wounded in battle near Atlanta, Ga., on 21st of July; was sent to the hospital at Forsyth, Ga. His wound was doing well, which was a very painful one in the side. Finally, he was taken with Pneumonia. He lingered under this disease for some time and was forced to surrender to this fatal attack and died on the 21st of August. . . .

Bob Neal (a comrade).[14]

In late July, as his troops lay siege to Atlanta, Sherman sent a cavalry force southward to destroy Confederate railway lines. The threat posed by these raiders caused Medical Director Stout to send a hasty circular to his hospital chiefs: "Surgeons in chge of Hospital Posts are not expected to await orders, when their posts are in danger of capture by the enemy, but will remove at their discretion to some place of safety." The Yankee horsemen, headed for Macon, did not enter Forsyth. But they came close enough to create a panic on the night of July 30, among slaves at work on the McFerrin hospital south of town. As he heard the sound of gunfire the next day, Surgeon D. D. Saunders explained to Stout that he would have had this hospital ready for patients, "but the proximity of the Raiders stampeded the negroes at work and I will be delayed."[15]

"In assessing the work of Dr. Patterson and his colleagues at Clayton Hospital, perhaps the best judgement is that given by a Confederate medical officer after the war: 'We did not do the best we would, but the best we could.'"

Enemy cavalry raids did not disrupt Stout's hospital system; neither did Sherman's occupation of Atlanta on September 1. A month later, however, when the Confederate army struck north from Palmetto to begin an invasion of Tennessee, Stout had to rearrange his hospitals in middle and southern Georgia. On October 1, Surgeon Patterson was ordered to remove by rail to Americus all patients and property at the Clayton Hospital. The Hardee Hospital would also be moved there, while the Foard, Gilmer, Johnston, and Academy

hospitals were ordered to Columbus. All patients too sick to be removed would remain at the Female College under the direction of Surgeon M. J. Bolan.

The trains needed for this transportation did not arrive in Forsyth until October 16. Even then there were insufficient cars. Patterson, placed in temporary command of the hospitals in town, ordered patients in the Hardee facility to be boarded for Americus, although the hospital property itself had to await a wagon train that night. Clayton Hospital was still in Forsyth a week later, awaiting means of conveyance. But by then orders had changed: Patterson was instructed to move his hospital to Selma, Alabama. The complicated removal of patients, medical staff, and equipment began on October 25, and on the second of November Surgeon Patterson reached his destination. Scarcely had he arrived there before he received further orders to carry his facility by rail to Columbus, Mississippi, "and open Clayton Hospital." Patterson and his staff made the move, arriving at Columbus on the sixth. By November 15, they were caring for 500 patients, although handicapped by shortage of shelter, bedding, cooking utensils, stoves, and fuel. The next day one of Patterson's assistant surgeons reported that the hospital was "in rather a confused, but at the same time progressive condition." On January 4, 1865, Patterson reported that the Clayton had 500 beds located in five large buildings on Main Street in Columbus. In the 3 months previous, his staff had treated 749 cases "of the ordinary character," with only 16 deaths.[16]

The last entry in the Order and Letter Book is dated January 10, 1865, but there is other evidence regarding John Patterson's subsequent work. With the collapse of the Army of Tennessee after its disastrous defeat at Nashville, December 15-16, Surgeon Stout again repositioned his hospitals by moving them back to Georgia, which Sherman had largely vacated in his campaign for the Carolinas. On February 25, 1865, Patterson was relieved of duty in Mississippi and ordered to return to Forsyth. There he reestablished Clayton Hospital in early March, and was apparently awaiting orders for possible further movement to Charlotte, North Carolina, when the surrender of Lee's and Johnston's armies ended Confederate resistance.[17]

In assessing the work of Dr. Patterson and his colleagues at Clayton Hospital, perhaps the best judgement is that given by a Confederate medical officer after the war: "We did not do the best we would, but the best we could."[18] Considering the limitations of their knowledge, and the trying circumstances which hampered them especially in the last year of the war, it is clear that Confederate surgeons such as John Patterson served both their profession and their country with considerable distinction.

Notes

1. James O. Breeden, "A Medical History of the Later Stages of the Atlanta Campaign," *Journal of Southern History*, XXXV (1969), 54-55; Breeden, *Joseph Jones, M.D.: Scientist of the Old South* (Lexington: University Press of Kentucky, 1975), pp. 152-54.For more on the difficulties faced by Surgeon Patterson and his colleagues, see Bruce S. Eastwood, "Confederate Medical Problems in the Atlanta Campaign," *Georgia Historical Quarterly*, XLVII (1963), 276-92. The author wishes to express his deepest appreciation to Mrs. L. Newton Turk for her kindness in lending the Clayton Hospital Order and Letter Book and other valuable material for the preparation of this article.

2. John Patterson Military Service Record, National Archives, Washington; H. H. Cunningham, *Doctors in Gray: The Confederate Medical Service* (Baton Rouge: Louisiana State University Press, 1958) pp. 129-31. If sent to prison, Patterson would have been confined at Johnson's Island on Lake Erie where his brother-in-law, Lt. Frank H. Lytle (also of the 18th Tennessee) was confined (G. H. Baskette, "Eighteenth Tennessee Infantry" in John Berrien Lindsley ed., *The Military Annals of Tennessee* [Nashville, 1886] p. 362).

3. Patterson Military Service Record; Kate Cumming, *Kate: The Journal of a Confederate Nurse*, ed. by Richard Barksdale Harwell (Baton Rouge: Louisiana State University Press, 1959), p. 98; Samuel H. Stout to Isabel Harmon, Sept. 22, 1863; S. M. Bemiss to Stout, Dec. 15, 1863; and "Memoirs of Surgeons of Confederacy" (Stout Manuscript) in Samuel Hollingsworth Stout Papers, Emory University Library Special Collections; Clayton Hospital Order and Letter Book, pp. 791, 795, 841. After the war, Stout named John Patterson among the dozen-and-a-half Tennesseans distinguished by their Confederate medical service (Clement A. Evans, ed., *Confederate Military History* [Atlanta, 1899 (repr. 1962)], VIII, 268). The author wishes to acknowledge his gratitude to Mary Anne Hill, Ginger Cain, Richard Linderman, and Linda Nodine of the Emory University Special Collections Department for their help in providing manuscripts relating to Patterson and Stout.

4. Clayton Hospital Order and Letter Book, pp. 804-805. Confederate Surgeon Joseph Jones, who conducted extensive wartime research on hospital gangrene, concluded that the disease had several causes. Subscribing to the prevailing miasmatic theory of sickness, Jones surmised that "the exhalations which contaminate the atmosphere of the crowded, badly ventilated, and filthy tent, hospital, or ship" were a principal factor. Closer to what we know as the truth, Dr. Jones also blamed "the contact of the gangrenous matter with diseased and wounded surfaces, as in using unclean sponges, bandages, washbowls, and surgical instruments." But he also contended that gangrenous infections were constitutionally induced by "exposure, fatigue, bad diet, and impure water" (Breeden, *Joseph Jones, M.D.*, pp. 203-204).

5. Pasted to page 806 of the Order and Letter Book is Surgeon Stout's Circular, sent from Atlanta, January 1, 1864, indicating all the reports expected from surgeons in charge of hospitals. The volume of paperwork was such that some hospital medical directors had little time to treat patients (Cunningham, *Doctors in Gray*, p. 74).

6. Paul E. Steiner, *Disease in the Civil War: Natural Biological Warfare in 1861-1865* (Springfield, Ill.: Charles C. Thomas, Publisher, 1968), p. 5; Clayton Hospital Order and Letter Book, pp. 813, 815, 820, 830, 837, 843, 861, 865, 881.

7. Clayton Hospital Order and Letter Book, pp. 824, 833, 846, 850, 868, 871.

8. Ibid., pp. 825, 836, 845.

9. Cunningham, *Doctors in Gray*, pp. 75-76; Clayton Order and Letter Book, pp. 822, 828-830, 857, 860.

10. Clayton Hospital Order and Letter Book, pp. 849-51, 855, 857-58, 866-67, 870, 882; Patterson to Surgeon [William H.] Prioleau, Aug. 13, 1864, Patterson Military Service Record. The Monroe Female College building, which served as part of Clayton Hospital, is pictured in Eugenia Wootton Stone, *Yesterday at Tift* (Doraville, Ga: Foote & Davies, 1969), p. 8. It burned in 1879 but was rebuilt. Today, as part of Tift College, it bears a plaque indicating use of the site as a Confederate hospital. (Regarding these details the author acknowledges the assistance of Professor Susan Conner and Assistant Librarian Ann Park, of Tift College.)

11. Dudley D. Saunders to S. H. Stout, July 16 and 31, 1864, Stout Papers, Emory University. The Stout Hospital was renamed for General Johnston after the latter was relieved from command of the Army of Tennessee on July 17. The McFerrin was probably a temporary facility. While it is listed as one of the seven Forsyth hospitals visited by Dr. Joseph Jones during July-September (Jones, "Roster of the Medical Officers of the Army of Tennessee," *Southern Historical Society Papers*, XXII [1894], 277), it was apparently not in operation when the Confederate Medical Department evacuated Forsyth in mid-October 1864.

12. Clayton Hospital Order and Letter Book, pp. 859-60, 875, 881.

13. Medical statistics for Clayton Hospital during these 2 months of the Atlanta Campaign are obtained from a manuscript report prepared by Confederate Surgeon Joseph Jones, who made two inspection tours of Georgia hospitals in the latter part of the year (Breeden, *Joseph Jones, M.D.*, p. 150-52; and Breeden, "Medical History of the Atlanta Campaign," 32). Jones, "Consolidated Report of Sick & Wounded in Hospitals of the Medical Department, Army of Tennessee for Month of July 1864" and *ibid.*, "August 1864" are preserved in the Joseph Jones Collection at Tulane University.

The author wishes to express his sincere appreciation to Wilbur E. Meneray, Head of Rare Books and Manuscripts, Howard-Tilton Memorial Library of Tulane University, for providing a photoduplication of the Jones reports.

14. Clayton Hospital Order and Letter book, p. 860; T. E. Smith, *The History of Education in Monroe County* (Forsyth, Ga., 1934), p. 103. Neal's letter is also quoted in *Monroe County, Georgia: A History* (Forsyth: Monroe County Historical Society, Inc., 1979), p. 154. Sergeant Darter is buried at Forsyth Cemetery in the Confederate section, which holds the graves of 300 soldiers who died in the Clayton, Hardee, and other hospitals of Forsyth. Of these 300, all are unknown save for Darter and one other. The soldiers' section also contains the grave of Honora Sweney, a young woman who died while serving as a nurse in one of the hospitals.

15. Clayton Hospital Order and Letter Book, p. 874; D. D. Saunders to S. H. Stout, July 31, 1864, Stout Papers, Emory University. The Federal cavalry raid south of Atlanta in late July 1864 is thoroughly treated in Byron H. Mathews, *The McCook-Stoneman Raid* (Phila., 1976).

16. Clayton Hospital Order and Letter Book, pp. 893, 895-99, 900, 902, 906, 925-26.

17. Patterson Military Service Record; Samuel L. Clark and H. D. Riley, Jr., eds., "Outline of the Organization of the Medical Department of the Confederate Army and Department of Tennessee by S. H. Stout," *Tennessee Historical Quarterly*, XVI (1957), 66. A photostatic copy of Stout's original manuscript of his "Outline" is in the Stout Papers, Emory University. The author wishes to thank Dr. Riley, who practices pediatrics in Oklahoma City, for information regarding publication of this useful document. For more information on Surgeon Stout, see Julia Emmons, "The Medical Career of Samuel H. Stout," *Journal of the Medical Association of Georgia*, LXIX (1980), 904-910, and LXX (1981), 169-77.

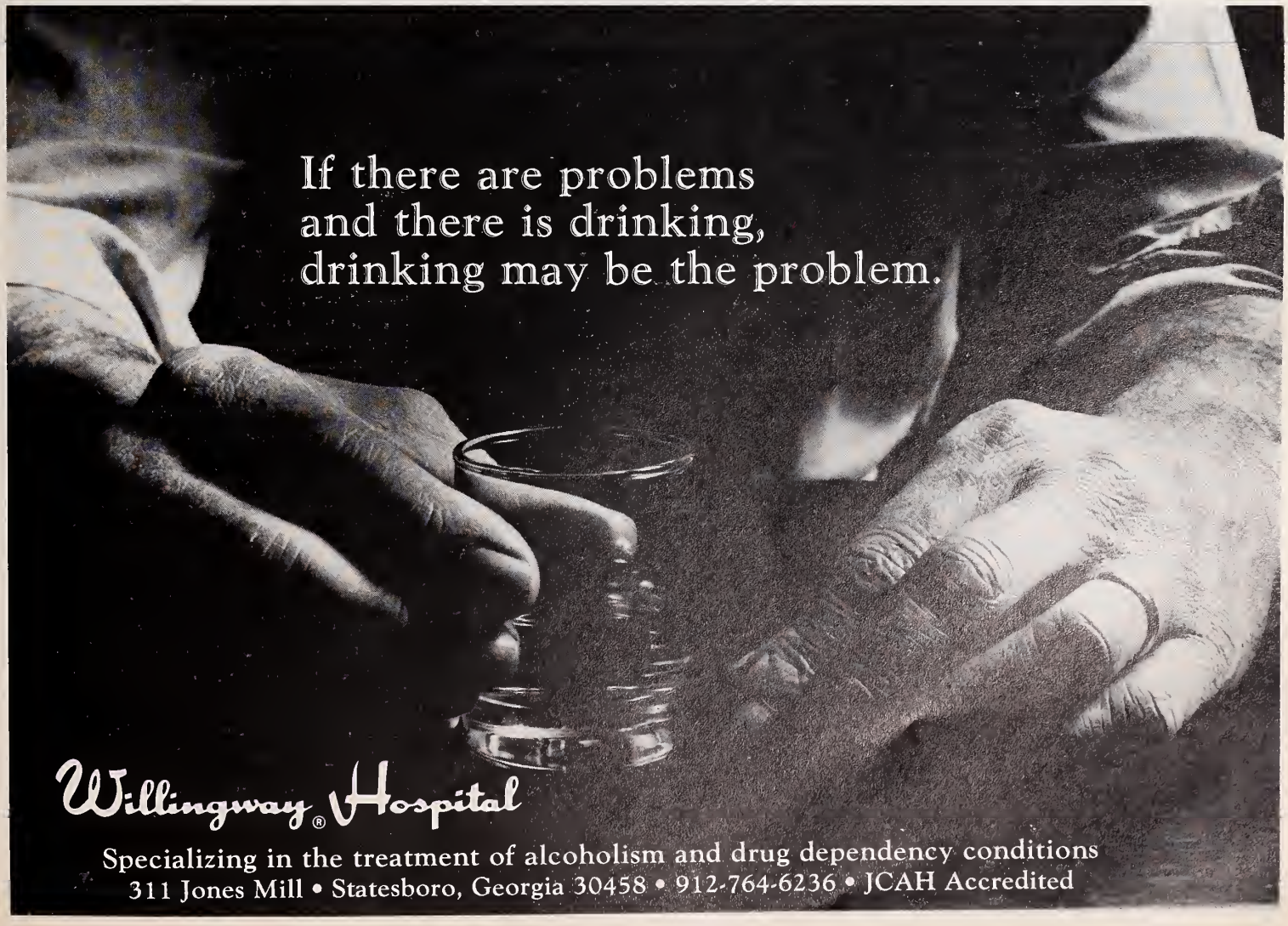
18. Cunningham, *Doctors in Gray*, p. 265. After the war, Dr. Patterson returned to his home in Murfreesboro. In 1882, he and his family moved to Auburndale, Florida, where he died on June 28, 1903.

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THREE-WHEELER INJURIES IN SOUTHEAST GEORGIA

TONY M. SUSSMAN, M. RICK TIMMS, M.D., AND CARL R. BOYD, M.D.

THE THREE-WHEELED motorcycle has enjoyed a recent boom in popularity in this country over the last few years; unfortunately, along with this popularity has come an increase in injuries as a result of three-wheeler accidents.

The Consumer Product Safety Commission (C.P.S.C.) estimates that there are now 1.85 million of these vehicles in use, and by the end of 1985, the total is expected to reach an estimated 2.5 million. In 1984, there were an estimated 66,956 emergency room visits as a result of three-wheeler accidents, and during the first 4 months of 1985, there were an estimated 28,000 — representing an 80% increase over the same time period from the previous year.

In an effort to assess the impact of this problem in southeast Georgia, our experience with three-wheeler accidents is reported.

Materials and Methods

Charts of patients treated in a rural southeast Georgia Hospital Emergency Department and at the Regional Trauma Center, Memorial Medical Center, Savannah, Georgia, were reviewed for off-road motor vehicle accidents from January, 1984, through June, 1985, and analyzed as to the type of vehicle. There were 40 patients who sustained injuries as a direct result of accidents while riding three-wheelers. The injuries were graded using the Abbreviated Injury Scale,[1] and for each patient the Injury Severity Score was calculated as described by Baker et al.[2]

"Although restrictive legislation will be opposed by many manufacturers and consumers, physicians are encouraged to support efforts to establish licensing requirements for three-wheeled motorcycle use and thereby improve the safety of this popular but hazardous vehicle."

Results

The age range of the 40 accident victims was 4-42 years, with a mean age of 18. Of these, 15 (37.5%) were ages 10-14, and three (7.5%) were less than 10 years old.

Of the 40 victims, 33 (82.5%) were males, 38 (95%) were white, 39 (97.5%) had insurance, 39 (97.5%) were driving at the time of the accident (one passenger); and 32 (80%) were not wearing helmets at the time of the accident.

Mr. Sussman is a senior medical student at MCG; Dr. Timms is a general surgeon in private practice; and Dr. Boyd is a general surgeon and Director of the Trauma Service at MCG. Send reprint requests to Dr. Boyd at the Memorial Medical Center, Inc., P.O. Box 23089, Savannah, GA 31403.

Fifty-eight percent of the accident victims seen in the emergency room did not require hospitalizatin. Those who did stayed from 1-20 days, with a mean stay of 8.2 days.

Causes of the accidents according to victims and witnesses, not available in every case, are listed in Table 1. Additionally, five patients (12.5%) were noted to be grossly intoxicated in the emergency room, and all of the accidents occurred off-road, on private property.

Table 1 — Mechanism of Three-Wheeler Injuries

Overturned (10)
Fell off vehicle (8)
Hit embankment (2)
Hit tree at night (2)
Hit cow at night (1)
Ran into tree limb (1)
Arm caught in handlebars (1)
Thrown from vehicle into telephone pole (1)
Fell off back seat as passenger (1)

The injuries sustained in the accidents are listed in Table 2. The mean injury severity score was 7.8 (range 1-75). In addition, there was one fatality. Injuries consisted primarily of head and extremity injuries, numerous clavicular fractures, but few major abdominal injuries.

Table 2 — 104 Injuries Sustained in 40 Patients

Head
Avulsion optic nerve (1)
Orbital floor fracture (3)
Infraorbital rim fracture (1)
Facial laceration (8)
Trimalar fracture (1)
Mandibular fracture (2)
Maxillary fracture (2)
Closed head injury (1)
Brain stem injury (1)
Epidural hematoma (2)
Cerebral contusion (4)
Cerebral concussion (3)
Basilar skull fracture (1)
Scalp laceration (3)

Torso and Arms
Back strain (1)
Clavicle fracture (4)
Rib fracture (2)
Chest contusion (2)
Pulmonary contusion (1)
Lacerated spleen (1)
Upper extremity abrasion (14)
Humerus fracture (1)
Coronoid process of elbow fracture (1)
Radius fracture (6)
Ulna fracture (5)
Metacarpal fracture (1)
Flank abrasion (1)
Femur fracture (3)

Lower Extremities
Thigh contusion (3)
Knee contusion (5)
Knee strain (2)
Knee laceration (2)
Tibial plateau fracture with popliteal artery thrombosis (1)
Tibia fracture (1)
Fibula fracture (1)
Lower extremity abrasions (10)
Metatarsal fracture (1)
Dorsum of foot contusion (1)
Traumatic toe amputation (1)

Discussion

Introduced in this country in 1971, the three-wheeled motorcycle is classified as an all-terrain vehicle (ATV) by the Specialty Vehicle Institute of America (SVIA). The SVIA defines an ATV as any off-highway vehicle, 50 inches or less in width, having a dry weight of 600 pounds or less, traveling on three or more low pressure tires, and having a seat designed to be straddled by the driver. The range of characteristics of the different models of three-wheelers available in this area include the following: displacement (60-250 cc), weight (100-450 lbs), top speed (30-90 mph), and cost ($700-$2200). Safety features present on some small ATVs include a throttle/speed limiter and special footguards. In addition, local ATV dealers reported that the vast majority of customers who purchase a three-wheeler also purchase a helmet.

There has been a marked increase in the annual sales volume of the three-wheelers over the past 3 years. Nationally, an estimated 306,000 were sold in 1982; 484,000 were sold in 1983; 650,000 in 1984; and an estimated 780,000 will be sold by the end of 1985. Nationwide, sales of similar motorized vehicles such as off-road motorcycles have remained at a relatively constant annual sales rate (150,000-250,000 annually), while other motorized recreational vehicles — minibikes and snowmobiles — have had reductions in popularity.

Paralleling the increase in sales of the three-wheelers are the increasing numbers of injuries and deaths related to three-wheeler accidents. In an ongoing nationwide study, the C.P.S.C. reports that thus far, ATV accidents account for 17 deaths in 1982, 51 deaths in 1983, and 69 deaths in 1984.

The victims of the three-wheeler accidents in this study have definite characteristics: they are white males in their teenage years living in rural areas and from relatively affluent families. All but one of the victims had insurance. Also of note is that the majority of the victims were not wearing helmets at the time of the accident.

Though the three wheeler may appear stable because of its wide tripod base, in fact, it has a high center of gravity and as a result can overturn rather easily as the accidents in this study demonstrated. Oversized low pressure tires, while improving traction, can impart a destabilizing bounce on rough terrain. In addition to this misconceived stability, many states such as Georgia have no licensing, no training, no age or weight limits, and no helmet requirements for the drivers of these vehicles. According to the Georgia State Patrol, three-wheelers are not street-legal vehicles (i.e., they do not possess blinkers, brakelights, etc.) and, therefore, neither the vehicle nor the driver come under jurisdiction of the law as long as they are driven on private property. As a result, the average driver is unskilled, unprotected, and unaware of the dangers associated with these vehicles.

In addition to manufacturers advertising to stress the safety aspects of three-wheeling, increasing public awareness through public safety campaigns as to the dangers associated with these vehicles and to encourage their proper use might help decrease unnecessary injuries.

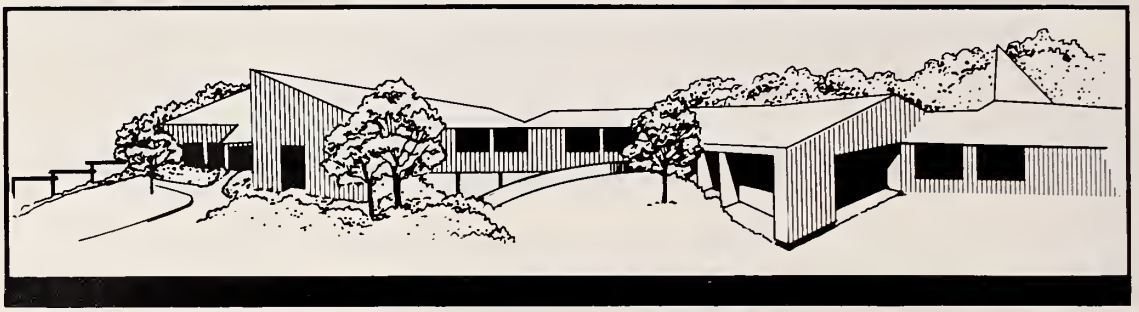
Conclusion

In conclusion, three-wheeler accidents are indeed a problem in southeast Georgia as well as nationwide and, because of the increasing number of injuries and deaths associated with three-wheeler accidents, the instability of the vehicle itself, and the lack of driver training or supervision, some type of regulation is necessary.

In an attempt at internal regulation and avoiding restrictive regulation by the states or the CPSC, the major three-wheeler manufacturers (American Honda, Kawasaki, Suzuki, and Yamaha) established the SVIA in 1983 with the primary purpose of promoting

Continued on p. 33

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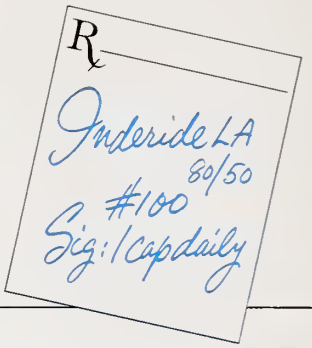


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Propranolol hydrochloride (INDERAL®):
Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol

Hydrochlorothiazide:
Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL®):
CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patients should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide:
Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL®):
GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide:
GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL®):
Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia, congestive heart failure; intensification of AV block, hypotension; paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:
Gastrointestinal: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo, paresthesias, headache, xanthopsia.

Hematologic: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions.

Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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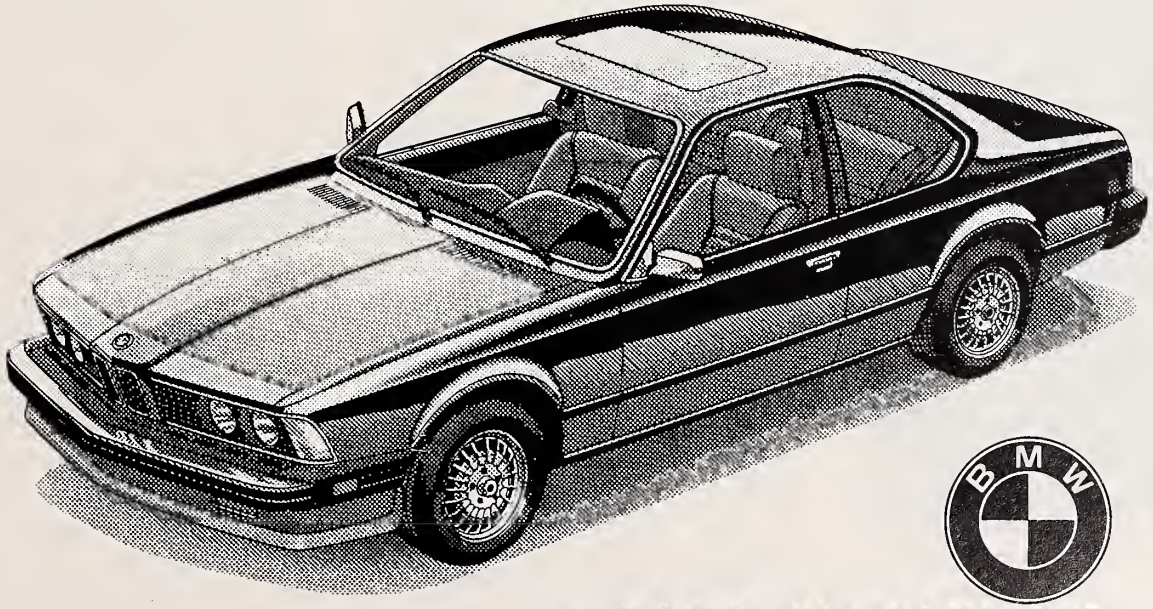
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NEUROFIBROMATOSIS

A review of its musculoskeletal manifestations.

PETER L. MEEHAN, M.D.

Neurofibromatosis is defined as a hereditary, hamartomatous disorder of probable neural crest origin. It involves neuroectoderm, mesoderm, and endoderm and may appear in any organ system in the body.[1] The incidence of neurofibromatosis is said to be one in 2500 to 3000. While it has been considered an autosomal dominant trait with incomplete penetrance and a high mutation rate, recent dermatoglyphic analysis challenges this theory.[2] Classification systems have been proposed by Young[3] and Riccardi.[4]

The condition is progressive; thus, cafe-au-lait spots in an infant may portend the development of further lesions, though subcutaneous neurofibromata do not usually become clinically manifest until 8 to 10 years of age. The disease may affect any organ system, including the gastrointestinal, cardiovascular, endocrine, and nervous systems. The musculoskeletal system is one of the most commonly involved systems in the disease process. The following is a review of the musculoskeletal manifestations of neurofibromatosis.

"While this disease has been considered an autosomal dominant trait with incomplete penetrance and a high mutation rate, recent dermatoglyphic analysis challenges this theory"

Congenital Bowing and Pseudarthrosis

Ducroquet[5] in 1937 is credited with first reporting the association between congenital pseudarthrosis of the tibia and neurofibromatosis. Aegerter's study[6] revealed that extensive defective bone formation, and not soft tissue tumors, weakens the bone, resulting in fracture. Histologically, a mass of fibrous tissue is commonly found at the site of pseudarthrosis. If this tissue is removed, normal callus fails to form, in contrast to pathologic fractures caused by benign tumors (i.e., enchondromas) which heal promptly after removal of tumor tissue.

Dr. Meehan practices orthopedic surgery. Send reprint requests to him at 1001 Johnson Ferry Rd., Atlanta, GA 30363.

The most frequently involved bone is the tibia, although lesions in the radius and ulna have also been reported.[7, 8] Lesions of the tibia initially present as anterior and lateral bowing at the junction of the middle and distal one-third of the tibia (figure 1), which, despite treatment, generally go on to fracture and pseudarthrosis.

Murray,[9] in the only long-term study of this condition, found that upon reaching skeletal maturity, only one-third of the patients had a satisfactory result. Nearly half had below-knee amputations, while the remainder had combinations of nonunion, shortening, deformity, and long-leg bracing. The prognosis appeared better in those patients who sustained fracture after age 8. Long-term bracing of children in the bowing stage prevented fracture.

Once fracture has occurred, surgery is necessary if union is to be achieved. Conventional methods of bone grafting can effect union of a congenital pseudarthrosis, but the tibia will spontaneously refracture in most cases. Morrissy[10] found the Farmer procedure, in which a composite skin and bone pedicle

graft is taken from the unaffected leg, to be clearly superior in achieving union. Recent microsurgical advances permit transfer of the contralateral fibula with a cuff of muscle tissue. Early results are encouraging, but long-term maintenance of union is, as with other procedures, likely to be a concern because of the mesodermal dysplasia aspect of neurofibromatosis.

Focal Overgrowth

Localized gigantism is another skeletal manifestation of neurofibromatosis. It is most commonly unilateral, involving a lower extremity or the head and neck. Elephantoid changes may be seen in the young child, but will become more noticeable in late childhood and early adolescence. The masses often contain a large hemangiomatous or lymphangiomatous component and may also contain a beaded plexiform neuroma.

Vascular changes, such as angiomas, aneurysms, and other pathologic changes of the vessel walls, may also be associated with this disease.

In a lower extremity, characteristically sinuous elongation of the underlying long bone is seen, with wavy irregularity of the thickened cortex. Actual overgrowth of bone occurs in the involved segment, resulting in the affected limb being longer than the uninvolved leg. While several theories of pathogenesis have been proposed,[11, 12, 13] the most plausible explanation may be the increased blood supply furnished by hemangiomatous and lymphangiomatous elements in the soft tissue.

In contrast, when the head and neck are affected, the underlying bone is hypoplastic. The tumor tissue is not immediately adjacent to the deformed bone; thus, pressure erosion cannot be the sole etiology.

Periosteal dysplasia

Following trauma, massive subperiosteal hemorrhage has been reported in association with elephantoid changes.[14, 15] Subperiosteal cyst formation has also been described (Figures 2A and 2B), with pathologic findings of periosteal thickening with neurofibromatous infiltrations into the periosteum or subperiosteum.

Recent microsurgical advances permit transfer of the contralateral fibula with a cuff of muscle tissue.

An abnormal periosteum may account for the ribbon-like appearance of the ribs often seen in neurofibromatosis, as well as the easy periosteal elevation observed during surgery on the limbs of patients with elephantoid changes.

Hypotheses to explain these changes include vascular abnormalities,[11] direct periosteal invasion by neurofibromatous tissue,[16, 17, 18, 19] and defective bone formation.[13, 20, 21]

Soft tissue hemorrhage

Vascular changes, such as angiomas, aneurysms, and other pathologic changes of the vessel walls, may also be associated with neurofibromatosis.[22, 23, 24] Many researchers feel the soft tissue hemorrhage is a result of these vascular malformations.

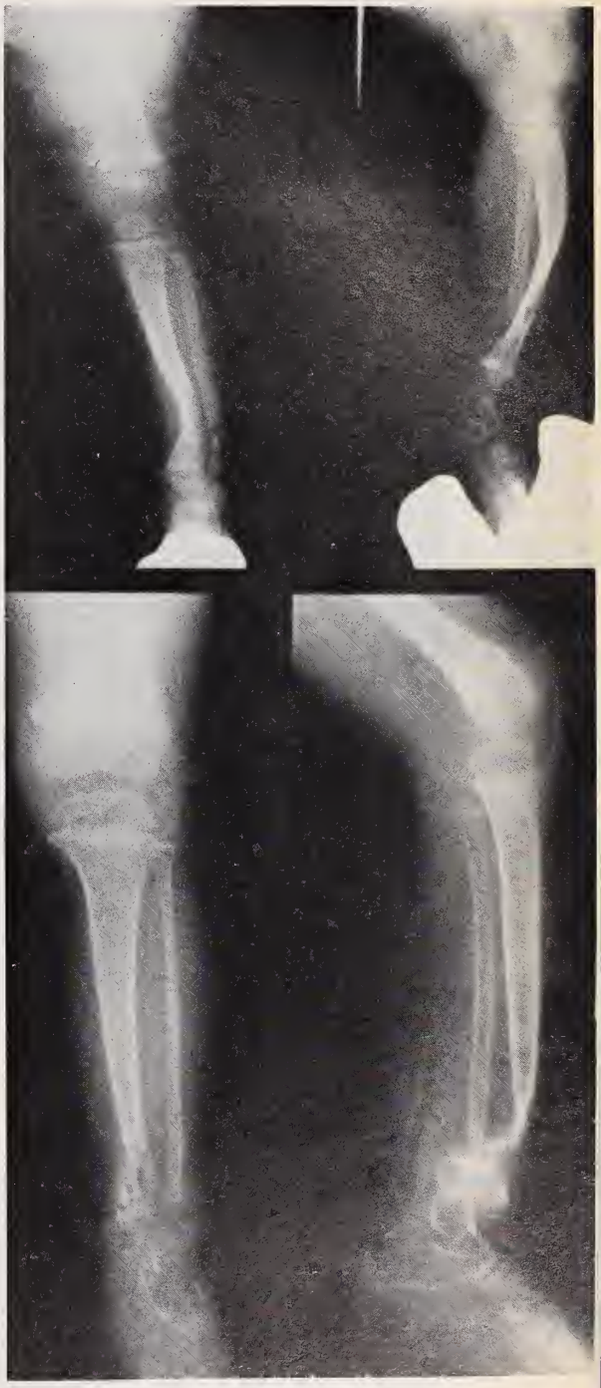


FIGURE 1-A: Radiographs of an infant demonstrating the characteristic changes of congenital pseudarthrosis of the tibia in the pre-fracture stage. Note the anterior and lateral bowing of the tibia in association with increased density of the medullary canal in cyst formation. FIGURE 1-B: After multiple surgical attempts to affect union, one can observe the pseudarthrosis, medullary narrowing, and lack of growth from the distal tibial epiphysis.



FIGURE 2-A: AP film of the distal femur demonstrating what appears to be multiple cystic lesions. FIGURE 2-B: The lateral view demonstrates that these lesions are actually subperiosteal in origin.

Scoliosis

Further evidence that neurofibromatosis is a disorder of mesodermal origin is its involvement in the spine. Scoliosis is the most frequent skeletal manifestation, occurring in approximately 40% of patients. Two types of scoliosis are seen: a short, sharply angulated deformity which may be associated with kyphosis (Figures 3A and 3B), and curvature identical to that seen in idiopathic scoliosis. Bony changes include severe wedging, scalloping of the vertebral bodies, pencilling or narrowing of the metaphyses of the adjacent ribs, and foraminal enlargement. Winter et al.,[25] recommended early fusion for those patients with dysplastic curvature, as nonoperative treatment appears ineffective. When kyphosis is present, anterior fusion is also necessary. If laminectomy is required for tumor removal in a dysplastic area, then fusion should be done to prevent severe secondary deformity. Nondysplastic spinal deformity may be managed in the same manner as idiopathic scoliosis.

Cervical spine abnormalities,[26] atlantoaxial dislocation,[27] paraplegia,[28, 29] and complete



FIGURE 3-A: AP radiograph demonstrating moderately severe scoliosis. FIGURE 3-B: Lateral view demonstrating scalloping of vertebral bodies posteriorly. FIGURE 3-C: The myelographic dye fills the scalloped defect. The cause of the scalloping, therefore, is dural ectasia.

spinal dislocation following minor trauma[30] have all been reported in patients with neurofibromatosis.

Further evidence that neurofibromatosis is a disorder of mesodermal origin is its involvement in the spine. Scoliosis is the most frequent skeletal manifestation.

Summary

Not only are the skeletal manifestations of neurofibromatosis common, but this disease can also affect any organ system. Such diverse problems as constipation, hypertension, seizures, and endocrine disorders are found more frequently than in the general population. It is for these reasons that Riccardi[31] has recommended multidisciplinary evaluation of the patient with neurofibromatosis.

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Three-Wheeler Injuries — Con't from p. 27.

and fostering the safe and responsible use of specialty vehicles, in which category the three-wheeler belongs. The SVIA has printed a multitude of safety literature and is also in the process of implementing a formal ATV safety training system through certified ATV instructors. Unfortunately, few ATV owners here in southeast Georgia take the time to obtain the safety literature and most are unaware of its availability. At present, there is no safety training program in southeast Georgia.

While manufacturers advertising has recently begun to stress the safety aspects of three-wheeling, additional steps that might be taken in order to decrease these unnecessary injuries and deaths include increasing public awareness as to the dangers associated with these vehicles as well as Public Safety Campaigns to encourage their proper use. Unfortunately, however, the limited success of similar Public Safety Campaigns, such as those encouraging seat belt and helmet usage, suggests that legislative action is necessary to limit child access and insure adequate training through Driving Licensing Requirements. The findings of this limited study illustrate the severity of this problem in southeast Georgia. Although restrictive legislation will certainly be opposed by manufacturers and many consumers, physicians are encouraged to support efforts to establish licensing requirements for ATV use and thereby improve the safety record of this popular, but hazardous, vehicle.

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ATYPICAL PULMONARY MYCOBACTERIOSES

Epidemiology, Diagnosis, and Treatment

RICHARD J. O'BRIEN, M.D.

Introduction and Epidemiology

ALTHOUGH species of mycobacteria other than *Mycobacterium tuberculosis* were first recognized nearly 100 years ago, soon after Robert Koch's discovery of the tubercle bacillus, it was not until some 60 years later that it was appreciated that these mycobacteria could cause disease in man. In 1954 Timpe and Runyon, working at the Veterans Administration Hospital in Atlanta, published their now classic paper categorizing these "atypical" mycobacteria into groups based on *in vitro* growth rate and pigment characteristics (Table 1).[1] The first three groups were slow growing mycobacteria which either formed pigment only when exposed to light (Group I photochromogens, e.g., *M. kansasii* and *M. marinum*), formed pigment when grown in the dark (Group II scotochromogens, e.g., *M. scrofulaceum*), or remained non-pigmented after exposure to light (Group III non chromogens, e.g., *M. avium* and *M. intracellulare*). The fourth group of mycobacteria grew rapidly in 3 to 7 days on standard culture media (Group IV rapid growers, e.g., *M. fortuitum* and *M. cheloneii*).

"Patients with symptomatic, cavitary atypical tuberculosis should be treated with antimycobacterial drug therapy, while those with minimal disease can often be followed without therapy."

Several years later, two series of patients with atypical mycobacterial disease were reported from sanitoria in Georgia and Florida where it was recognized that from 1 to 2 percent of these tuberculosis patients had pulmonary mycobacterial disease caused by *M. intracellulare*.[2, 3] Because much of the pioneering work on this disease was done at Battey State Hospital in Rome, Georgia, the organism became known as the Battey bacillus. In other parts of the country, such as Illinois and Louisiana, patients with atypical mycobacterial disease had disease due to the "yellow bacillus," *M. kansasii*.

Dr. O'Brien is Chief, Clinical Studies Section, Research and Development Branch, Division of Tuberculosis Control, Center for Prevention Services, Centers for Disease Control, Atlanta, GA 30333.

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Patients with atypical mycobacterial disease were epidemiologically distinct from those with tuberculosis. These patients were more likely to be white than non-white, more likely to be older, and very likely to have underlying chronic lung disease such as bronchiectasis or silicosis. Such patients commonly did not react to PPD-tuberculin but did react to PPD prepared from atypical mycobacteria, had close family contacts who were also tuberculin negative, and responded poorly to treatment with the available antituberculosis drugs (e.g., isoniazid, streptomycin, and PAS).

During the 1960s, the United States Public Health Service cooperated with the Department of Navy on a study of the distribution of skin-test reactions to PPD-tuberculin and PPD-B (prepared from *M. intracellulare*).[4] The subjects tested were young white male Navy recruits who had been single county residents all their life prior to entering the service. The results of tests in over a quarter of a million persons indicated that there was no relationship between sensitivity to tuberculin and to PPD-B. It further indicated that there was marked

geographic variability in reaction rates to PPD-B, with very high reaction rates approaching 80 percent in areas of the Southeastern United States, particularly along the Atlantic and Gulf coasts. Reaction rates were appreciably higher in recruits from rural areas than from cities.

These and other data indicated that infection from atypical mycobacteria was quite common but that true disease was distinctly uncommon. The single most important factor predisposing to pulmonary disease seemed to be conditions which impaired bronchopulmonary clearance. Undoubtedly other factors, such as undefined immunologic abnormalities, are also required for the expression of atypical pulmonary tuberculosis. During the last decade, as rates of tuberculosis have declined throughout the United States, atypical tuberculosis appears to be increasingly more common.

In an attempt to better define distribution and prevalence of disease, the Centers for Disease Control (CDC) has recently conducted two surveys. In the first, the CDC requested that State laboratories report isolates of potentially pathogenic mycobacteria made during 1979 and 1980 to the CDC.[5] The results indicated that approximately one-third of such isolates were atypical mycobacteria, while the remainder were *M. tuberculosis*. Of the atypical species, *M. avium* complex accounted for 60 percent, the Group IV rapid growers for 20 percent, *M. kansasii* for 10 percent, and other mycobacterial species for the remainder.

The second survey, conducted between 1981 and 1983, focused on information about patients from whom atypical mycobacteria were isolated. During that time, information was received about approximately 7,000 patients, and the distribution by species was similar to that found in the laboratory-based survey.[6] Ninety percent of these atypical isolates were made from sputum or bronchial secretion, 2 percent from lung tissue, and 4 percent from lymph nodes. The remainder of the isolates were made from other fluids and tissues.

Table 1 — Species of Atypical Mycobacteria of Clinical Importance

Group I — Photochromogens	*Group III – Nonchromogen*
M. kansasii	*M. avium* complex (includes *M. intracellulare*)
M. marinum	*M. malmoense*
M. simiae	*M. hemophilum*
M. asiaticum	*M. schimoidei*
Group II — Scotochromogens	*Group IV — Rapid Growers*
M. scrofulaceum	*M. fortuitum*
M. szulgai	*M. cheloneii*
M. xenopi	

Table 2 — Atypical Mycobacteria Reported From Georgia, October 1981 Through September 1983: Mycobacterial Species and Source of Isolate

Species	*Sputum*	*Lung BX*	*Skin*	*Lymph Node*	*Other*
M. avium complex	164	4	—	9	—
M. scrofulaceum	2	—	—	2	—
M. kansasii	5	—	—	—	—
M. marinum	—	—	1	1	2
M. cheloneii/M. fortuitum	15	—	—	—	2

The isolates reported from Georgia by source and species are shown in Table 2. The distribution of isolates by site is quite similar to that for the national data. However, the distribution by mycobacterial species is quite different. Eighty-six percent of the isolates are *M. avium* complex, while other species, especially *M. kansasii*, were much less frequent than would be expected if these organisms were uniformly distributed throughout the country. Characteristics of Georgia patients with atypical isolates are compared with tuberculosis patients in Table 3. The case rate for *M. avium* complex disease, as defined by the isolation of *M. avium* complex from tissue or reported isolation from sputum, was only one-tenth that for *M. tuberculosis*. The age distributions for the diseases were different, with over half the *M. avium* complex patients 65 years of age or over. Whereas non-whites are over-represented among tuberculosis patients, whites are over-represented among *M. avium* complex patients. Finally, there appears to be no difference in sex distribution by disease.

Recent studies of the ecology of atypical mycobacteria, especially of *M. avium* complex, has shown that these organisms are widely distributed in the environment, growing especially well in brackish waters throughout the southeastern United States.[7] *M. avium* complex organisms are easily aerosolized, carried in the air, and deposited in the soil, so that environmental exposure is common for man and is the presumed source of infection and disease.

Diagnosis

Because it appears that large numbers of patients are having sputa and other respiratory secretions cultured with the resultant isolation of atypical mycobacteria, practitioners may be increasingly confronted with the problem of how to manage these patients.

With the possible exception of *M. kansasii*, it seems that the majority of patients with atypical

Table 3 — *M. Avium* Complex and *M. Tuberculosis* in Georgia, Patient Characteristics

	*M. Tuberculosis**	*M. Avium* Complex**
Case Rate/10^6	14.7	1.3
Age Distribution (%)		
0-14	5	0
15-24	8	1
25-44	32	6
45-64	30	41
65+	24	53
Race (%)		
White	35	82
Other	65	18
Sex (%)		
Male	67	62
Female	33	38

* 1982 morbidity data reported to CDC
** NTMB surveillance data, 1981-1983

mycobacterial isolates from the sputum do not have disease. These patients, most of whom have underlying chronic obstructive lung disease with or without roentgenographic evidence of parenchymal disease, are commonly colonized by these organisms through environmental exposure. In fact, in one study, persons without any apparent pulmonary disease living in an area where there were significant numbers of these environmental mycobacteria were found to have the occasional isolation of atypical mycobacterial isolates from their respiratory secretions.[8]

Several criteria have been proposed for the diagnosis of atypical mycobacterial disease.[9] The first of these is that the organism be repeatedly isolated from the sputum or respiratory secretions in significant numbers or obtained from a biopsy specimen taken under sterile conditions. If significant pulmonary disease is truly present, one would expect that the sputum smears in most cases would be positive and that isolates of atypical tuberculosis would be made rather easily with the cultures showing heavy growth. Merely finding several colonies of *M. avium* complex in the sputum is usually of no pathologic significance.

However, even finding the organism in large numbers in repeated sputum specimens does not ensure the diagnosis of disease. It has recently been demonstrated that a number of patients may exhibit persistent colonization by *M. avium* complex but do not have invasive disease.[10] Many of these patients will have clearing of organisms from the sputum after a course of bronchial hygiene consisting of bronchodilators, broad spectrum antibiotics, smoking cessation, and chest physiotherapy when indicated. Patients without cavitary disease are much more likely to fall into this group than patients with cavitary disease.

It is also important to exclude other pulmonary diseases which may coexist with mycobacterial colonization and cause abnormalities on chest roentgenogram. The most important of these are pulmonary tuberculosis, either current or previously treated, bronchogenic carcinoma, bronchiectasis, silicosis, and chronic obstructive lung disease. The chest roentgenogram is not helpful for the differentiation between tuberculosis and atypical pulmonary tuberculosis. Some workers have suggested that atypical mycobacterial disease more commonly presents with thin walled upper lobe cavities whereas in pulmonary tuberculosis the cavities tend to be thick walled. However, these group distinctions have not proved useful for identifying the cause of disease in the individual patient.[11]

Other criteria which may be helpful in the diagnosis of disease include the presence of respiratory and systemic signs and symptoms. Most patients with disease have systemic manifestations such as fever and weight loss, as well as respiratory symptoms such as cough, sputum production, and hemoptysis. Symptoms of respiratory insufficiency such as dyspnea on exertion are more often associated with underlying chronic obstructive lung disease than with a mycobacterial process.

At one time it was hoped that differential skin-testing with purified protein derivatives (PPDs) prepared from various mycobacteria would separate patients with disease from those with colonization and distinguish between patients with atypical and pulmonary tuberculosis. Unfortunately, mycobacteria share many common antigens which are not species specific and, despite some work in this area, species-specific antigens which may be useful as diagnostic tests have not yet been identified. Currently the PPD skin test antigens are undergoing additional study at the Centers for Disease Control to determine if they do have clinical usefulness. At present, these tests are not available for clinical use. In the future, it is possible that newer techniques (e.g., DNA probes or monoclonal antibodies) might lead to better methods for distinguishing patients with atypical disease from those with colonization and from those with tuberculosis.

Finally, it is essential to consider the species of mycobacteria isolated. Species such as *M. kansasii* are more commonly associated with disease. *M. avium* complex less commonly causes disease. Isolates of the rapid growers (*M. cheloneii* and *M. fortuitum*) are even less likely to be associated with disease when found

in the sputum. Other species, such as *M. gordonae*, a Group II scotochromogen, have only rarely been associated with disease and can usually be readily dismissed as possible pathogens.

Treatment

One question often faced by a physician is how to approach a patient who is found to have acid fast bacilli on sputum smear with the culture pending or has mycobacteria growing from sputum culture with species identification not yet available.

In the case when tuberculosis is suspected but atypical mycobacterial disease is also a distinct possibility, the presumptive drug regimen should include treatment for both tuberculosis and the most likely atypical mycobacterial species. In Georgia, the latter is essentially restricted to *M. avium* complex disease. In other areas of the country, particularly southcentral United States, *M. kansasii* would be included. Although not proven by controlled clinical trials, the four drug combination of isoniazid, rifampin, ethambutol, and streptomycin has been recently recommended by a group of experts for initial treatment of newly diagnosed *M. avium* complex pulmonary disease.[12] This treatment would, of course, cover most patients with newly diagnosed pulmonary tuberculosis as well as provide adequate therapy against *M. kansasii* disease.

A similar circumstance would be consideration of therapy for a patient in whom the diagnosis of tuberculosis was considered but, because of negative AFB smears, treatment is not started until the laboratory reports that a mycobacteria species (identification not yet known) is growing on culture media. The laboratory may be able to make a presumptive identification of tuberculosis based on colonial morphology. Should the colonies not be typical of *M. tuberculosis*, the epidemiologic information indicates the diagnosis of tuberculosis unlikely, and treatment is definitely indicated because of presence of symptoms, initiation of therapy with the above mentioned four-drug regimen should be considered.

At present, surgical resection appears to be the procedure of choice for most patients with localized* M. avium *complex disease, especially those not responding to an initial medical regimen.

More commonly, however, patients have already been started on therapy with isoniazid and rifampin alone for the presumptive diagnosis of tuberculosis when the identification of *M. avium* complex is made. At this point, the physician is faced with the decision of stopping therapy, continuing with the current therapy to which the patient may have had an initial response, or changing the regimen with the addition of more drugs. If the patient does not have progressive symptomatic disease, and particularly if cavitary disease is not present, it may be prudent to stop antimycobacterial therapy and observe the patient for several months while additional sputum specimens are obtained for smear and culture, and bronchial hygiene is instituted. Patients who have rapid disappearance of atypical mycobacteria from the sputum with little or no antimycobacterial therapy probably do not have invasive disease. In addition, many patients with minimal disease, as indicated by the presence of roentgenographic infiltrates without cavities and the absence of respiratory symptoms, can be followed without therapy. Only in the case where clear progression occurs and/or the patient develops symptoms attributed to the mycobacterial disease would institution of therapy be indicated.

On the other hand, for patients who have symptomatic progressive disease or far advanced atypical tuberculosis when initially seen so that a period of observation would not be in the patient's interest, institution of therapy with at least four drugs as suggested above should be undertaken. Streptomycin is included in the regimen for the first 6 months, and the remaining drugs are continued for a total of 24 months. Such treatment has proven effective in a majority of such patients treated.[13-15] Patients with progressive *M. avium* complex disease who do not respond to this therapy or have rapidly progressive symptomatic disease should be treated with other agents which might include capreomycin, cycloserine, and ethionamide. In one center, a substantial proportion of patients aggressively treated with 5 or 6 drug regimens who had failed at earlier courses of therapy responded to this more aggressive treatment.[16] However, because of toxicity and side effects of these second-line drugs, patients are best managed under close supervision and preferably in hospital during the initial part of treatment.

Recent reports have suggested that short course regimens with isoniazid, rifampin, and ethambutol given daily for 12 months are appropriate for most patients with *M. kansasii*.[17] Other mycobacteria which occasionally cause pulmonary disease, such as *M. xenopi* and *M. simiae*, are somewhat intermediary between *M. kansasii* and *M. avium* in the difficulty with which they are treated.[18, 19] Pulmonary disease due to rapid growing mycobacteria is uncommon but may respond to treatment with antimicrobials such as tetracyclines, sulfonamides, cephalosporins, and amikacin.[20]

Finally, one must consider surgery for the treatment of selected patients, especially those with

localized disease. It has recently been recognized that non-tuberculous mycobacteria do on occasion cause coin lesions or solitary pulmonary nodules which are often resected because of a suspected diagnosis of bronchiogenic carcinoma.[21] In such cases, where the lesion has been excised and no other disease is present, no further therapy is indicated for the immunologically intact patient.

In the case when tuberculosis is suspected but atypical mycobacterial disease is also a distinct possibility, the presumptive drug regimen should include treatment for both tuberculosis and the most likely atypical mycobacterial species.

At present, surgical resection appears to be the procedure of choice for most patients with localized *M. avium* complex disease, especially those not responding to an initial medical regimen. The results of several published surgical series indicate that a substantial proportion of patients, i.e., 90 to 100 percent, show substantial improvement and sustained remission when treated with a combination of surgical resection and prolonged chemotherapy.[22, 23] Unfortunately, most patients with this disease have such extensive underlying chronic lung disease that they are not candidates for a surgical procedure. The procedure of choice is usually lobectomy or pneumonectomy, avoiding procedures that cut across tissue plains.

Summary

The practitioner may be increasingly faced with the problem of management of the patient from whom atypical mycobacteria have been found in respiratory secretions. In Georgia, the majority of such patients probably have casual isolates of *M. avium* complex not associated with true disease and are not in need of antimycobacterial drug therapy. Some patients with apparent disease are only heavily colonized by *M. avium* complex which can be cleared with aggressive bronchial hygiene. Patients with symptomatic, cavitary atypical tuberculosis should be treated, while those with minimal disease can often be followed without therapy. The choice of a drug regimen varies with the mycobacterial species isolated, the extent of disease, and previous therapy. In Georgia, the great majority of patients with atypical mycobacterial disease have *M. avium* complex isolated and can be managed with the four-drug regimen of isoniazid, rifampin, ethambutol, and streptomycin. Surgery remains the treatment of choice for the occasional patient with localized disease unresponsive to medical treatment who is able to safely tolerate surgery.

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Radionuclide Imaging in Congenital Heart Disease

Wesley Covitz, M.D., and Casimir Eubig, Ph.D.

"Radionuclide imaging complements traditional modes of patient examination as well as echocardiography and exercise testing. It is of particular value in assessing blood flow and cardiac function."

NEW DIAGNOSTIC MODALITIES are emerging so rapidly today that it is difficult to keep up with them all. Nuclear cardiology has evolved most dramatically over the past 15 years since the development of the high resolution gamma camera, the portable nuclear medicine laboratory, and the interface with digital computers. The major thrust has been toward the evaluation of coronary artery disease; however, pediatric applications have been developed, and radionuclide imaging complements other diagnostic tests such as echocardiography and exercise testing.

The question arises with so many diagnostic tests available, "What are the values and limitations of radionuclide imaging in congenital heart disease?"

Nuclear angiography and time-activity analysis

The nuclear angiogram is obtained by injecting a radioactive material intravenously and detecting the tracer as it passes through the heart and great arteries. The material is detected by a gamma camera which perceives radioactive emissions from within the body and produces an image. The signals resulting from events occurring at the crystal of the gamma camera are also perceived by a digital computer which acquires counts per second at thousands of locations across the surface of the crystal.

The nuclear imaging system is unique in that it provides a cine' presentation, yet attention may be focused on selected areas for time-activity analysis. A bolus of technetium labelled albumin when injected into an antecubital vein in the arm outlines the superior vena cava, right atrium, then right ventricle and pulmonary artery. After the lung phase, left atrium, left ventricle, and aorta are identified.

Anatomical areas may be better defined by stopping the angiogram and examining selected frames. Often several successive frames are combined to increase clarity. Corresponding locations on the camera crystal may be examined for changes in radioactivity (counts/second) as the bolus passes through the heart.

The right atrial time activity curve shows a rapid clearance of a tight bolus through the right atrium. The left ventricular curve is characteristically broader due to passage of the bolus through the lungs. Though the right ventricle is between the left ventricle and the camera, the ventricles are easily separated on a temporal basis, thus excluding the right ventricular contribution.

Cardiac output may be determined from time-activity curves over right atrium or left ventricle.[1, 2] The curves are similar to dye dilution curves and are calibrated by determining counts over the area of interest at equilibrium

and blood volume. The relationship, cardiac output = equilibrium counts × blood volume ÷ area under the time-activity curve, is then used. The equilibrium image may be obtained in most instances 3 minutes after injection of technetium labelled albumin. Blood volume may be presumed, based on body weight, or a sample obtained and counted to measure it.

Cardiac output over right atrium and left ventricle correlate well with each other. In the presence of a left or right shunt, the two sides correlate well if the volume overloaded site's output is divided by the pulmonary to systemic flow ratio, which may also be determined by time-activity curve analysis. The degree of shunting is proportional to the amount of radioactivity re-circulating through the lungs.[3]

Cardiac output at either site correlates well with Fick outputs obtained at catheterization. The significance of these observations is that it is now possible to measure cardiac output in children with complex lesions, by measuring it over the right atrium, which is proximal to bidirectional shunts at ventricular level, semilunar valve stenosis, or regurgitation. Thus, cardiac output may be obtained under conditions where even thermodilution techniques cannot be performed.

We now monitor children with radionuclides immediately after open heart surgery to detect low cardiac output and to exclude the possibility of a residual left to right shunt or valvular regurgitation.[4]

Following total surgical repair of a complete A-V canal, one patient (M.B.) was found to have a low cardiac output based on the time-activity curve over the right atrium. A curve over the right lung revealed no significant recirculation. The left ventricular curve, however, was very broad and remained well above the baseline, suggesting mitral valvular regurgitation. M.B. was returned to the operating room where the mitral valve was found to be grossly incompetent.

Nuclear angiography and time-activity analysis provide a cine' presentation for anatomic diagnosis, allow one to focus on an area of interest to produce time-activity curves, and offer temporal as well as spatial resolution, quantitation of cardiac output and left to right shunts, and detection of valvular regurgitation.

The limitations are the requirements of an injection of a radioisotope as a bolus and limited spatial resolution. Studies are time consuming and the equipment is expensive.

Left and right ventricular function testing.

ECG-gated images are ideally suited for evaluation of left and right ventricular function. The camera is triggered by the patient's own ECG at pre-selected intervals during the cardiac cycle. For equilibrium studies, this is repeated for hundreds of heart beats so each of the images of the study is the sum of many images taken at the same time after each R-wave. The result is a visual representation of a typical cardiac cycle. Chambers are separated by imaging in the left anterior oblique projection. The counts within the left ventricle during each interval describe a volume curve from which ejection fraction and velocity may be derived. There is no geometrical assumption as is the case in all other single or two dimensional techniques. The activity in the chamber reflects the actual blood volume of that ventricle during each stage of the cardiac cycle. Stroke volumes of right and left ventricles should be equal in the absence of a shunt or valvular regurgitation, so the relative stroke volume permits quantitation of these abnormalities.[5]

From the Departments of Pediatrics and Radiology, Medical College of Georgia. Send reprint requests to Dr. Covitz, Department of Pediatrics, Section of Pediatric Cardiology, MCG, Augusta, GA 30912.

Prepared at the request of the American Heart Association, Georgia Affiliate.

Absolute volume may be obtained by counting a blood sample of known volume and relating its activity to that in the left ventricle.[6]

Right ventricular function may be readily assessed by nuclear technique. The right ventricular ejection fraction has previously been available only by invasive methods. The right ventricle need only be isolated and its activity determined in systole and diastole. The most effective means is by ECG gating of a first pass study, which temporally isolates the right ventricle.

The nuclear exercise test provides serial measurements of cardiac output, ejection fraction, and end-diastolic volume during exercise and at maximum effort.

The contributions of ventricular function testing include gated equilibrium ejection fraction, ejection velocity and ventricular volume, first pass gated right ventricular ejection fraction, and quantitation of volume overload due to valvular regurgitation or left to right shunt. Portable equipment permits study in all clinical settings; dressings, chest tubes and lung abnormalities do not interfere; there are no geometrical assumptions, and repeated measurements are possible after interventions.

The limitations are that relating counts/sec to absolute volume requires assumptions about attenuation and scatter and regression analysis with catheterization data. Also, precise positioning is required for chamber separation on equilibrium images.

Stress testing

Perhaps the most exciting appliction of nuclear imaging is that of measuring cardiac function during exercise. Exercise testing in congenital heart disease is firmly entrenched as a non-invasive technique that provides useful information for clinical decision making. The data provided, however, are limited to detecting electrocardiographic signs of ischemia and decreased working capacity, which imply severe disability.[7] Oxygen consumption and cardiac output, through carbon dioxide rebreathing, offer no data on how the output is attained and whether abnormal adaptive mechanisms are used. The nuclear ejection fraction is ideally suited for exercise testing.

Serial measurements are possible during a graded test by the gated equilibrium technique. The counts in the end-diastolic image may be calibrated by a first pass cardiac output determination just prior to exercise to reflect end-diastolic volume. Ejection counts, therefore, reflect stroke volume which when multiplied by heart rate, yields cardiac output. Thus, one gated equilibrium study provides cardiac output, ejection fraction, and end-diastolic volume. These measurements may be repeated at each stage of a graded stress test.[8]

Children normally exercise in the upright position. Because the change in ejection fraction with sitting exercise is greater than with supine exercise, we perform our exercise tests sitting upright on a cycle ergometer.[9] This provides a wider range of responses for the measurement which is most accurately obtained by this technique. The greatest problem to be overcome is the elimination of motion between subject and detector during strenuous exercise. Motion is likely to be greatest in subjects who are tiring or giving out near maximum stress and is a potential source of error in interpreting ejection fraction at maximum exercise. Since ejection fraction at maximum is a sensitive indicator of decreased myocardial reserve, motion must be eliminated. For this purpose we developed the adjustable wedge mold and harness. The mold consists of a pillow filled with polystyrene beads that conforms to the subject's chest and holds the gamma camera at the obliquity where the left ventricle is best separated from other cardiac structures. When a vacuum is applied to the pillow it becomes hard, forming a mold. The subject is then harnessed to the gamma camera with the mold in between.[2]

Echocardiography has been used during exercise to make similar measurements, but serious limitations must be overcome. Maintaining the same axis plane in a moving subject is difficult. M-mode echocardiography is handicapped by the need to make geometric assumptions and assumption of a standard long axis shortening. Two-dimensional echocardiography is handicapped by the inability to maintain sharp images of endocardial surface during motion.

A normal response to a graded maximal nuclear stress test consists of a stepwise increase in ejection fraction to 0.80 or greater, a tripling of cardiac output and little, if any, change in end-diastolic volume. A variety of abnormal responses is possible; however, a fall in ejection fraction at maximum exercise with a reduced cardiac output response is seen in subjects whose cardiac function is most impaired.[2, 9]

In altered hemodynamics states such as aortic regurgitation or severe anemia, a large end-diastolic volume and exaggerated heart rate response may permit an adequate cardiac output to be reached without the usual ejection fraction response.[10] In other conditions, expected cardiac output may not be reached in spite of a normal ejection fraction and heart rate response.

The nuclear exercise test provides serial measurements of cardiac output, ejection fraction, and end-diastolic volume during exercise and at maximum effort. It is a sensitive indicator of myocardial function that separates mildly abnormal subjects

from normal, provides descriptive data on how a subject adapts to stress, and makes no geometric assumptions. Right ventricular function during exercise may be assessed as well.

The limitations are that an elaborate harness and careful positioning are essential, studies are time consuming and they require patient co-operation after a single injection of radioisotope. Children under 9 years are usually unsuitable.

Perfusion scanning

Myocardial perfusion scanning with thallium 201 has been demonstrated to be useful in the assessment of infants to discriminate between localized injury and congestive cardiomyopathy.[11] The material defines the left ventricular wall and interventricular septum when the myocardium is normally perfused. Decreased perfusion results in a cold spot or lack of activity.

Perfusion scans outline left ventricular wall and interventricular septum, have applications in congestive cardiomyopathy and transient myocardial ischemia of the newborn, and define coronary perfusion defects at rest and during exercise.

A thallium stress test was performed on a 9-year-old child who had collapsed while playing basketball. Myocardial infarction was diagnosed by clinical, ECG, and enzyme findings. Cardiac catheterization revealed an aberrant left coronary artery and an akinetic left ventricular wall segment that corresponded to the area of decreased uptake on the thallium scan. The thallium was injected during submaximal exercise which was continued for several minutes after injection. The post-exercise image defect suggested ischemia. The persistence of most of the defect on delayed images hours later confirmed the previous myocardial infarction. Applications of this technique are limited in congenital heart disease because the resolution of the gamma camera is inadequate to look at the subendocarial region. It was useful in this example because the myocardial injury was severe enough to result in a transmural defect.

Perfusion scans outline left ventricular wall and interventricular septum, have applications in congestive cardiomyopathy and transient myocardial ischemia of the newborn, and define coronary perfusion defects at rest and during exercise.

Limitations include poor resolution, inability to look specifically at the subendocardial region, limited applications in congenital heart disease, and potential problems due to the expense and non-availability of thallium 201.

Nuclear angiography and time-activity analysis provide a cine' presentation for anatomic diagnosis . . . offers temporal as well as spatial resolution, quantitation of cardiac output and left to right shunts, and detection of valvular regurgitation.

Summary

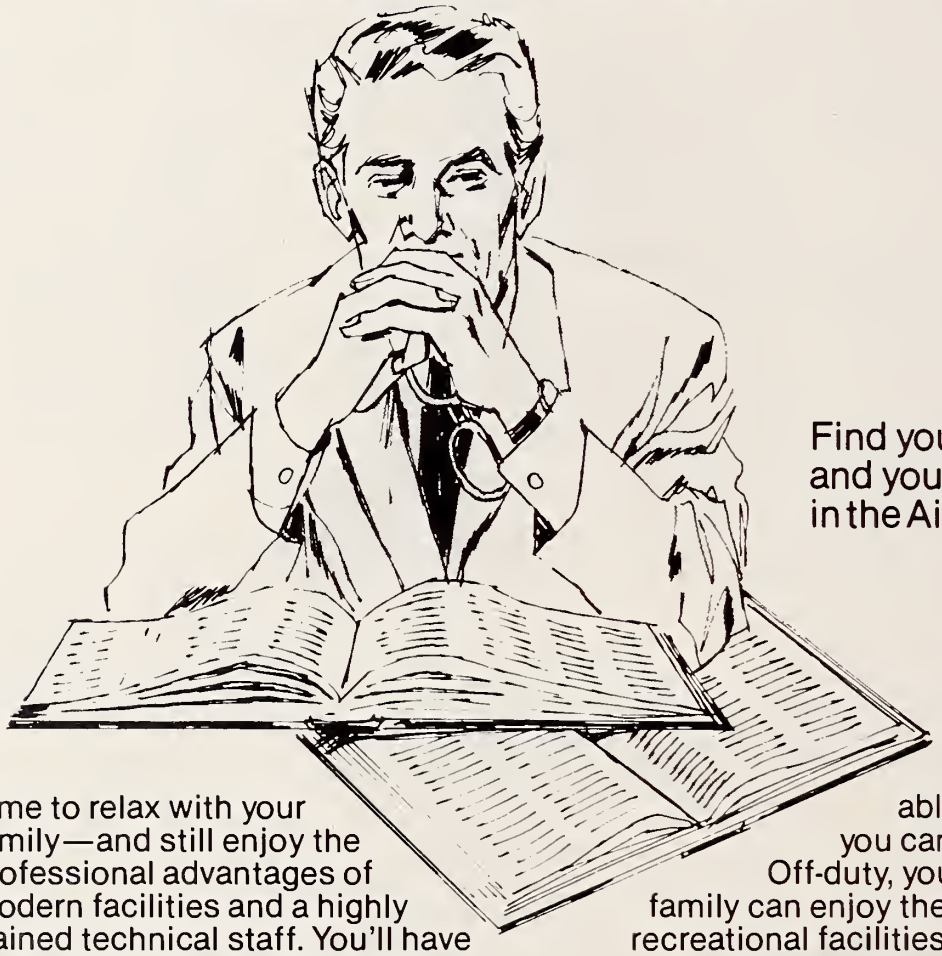
The values and limitations of radionuclide imaging and several important applications have been described. This diagnostic technique provides the means to answer questions previously unanswerable by non-invasive studies. Radionuclide imaging complements traditional modes of patient examination as well as echocardiography and exercise testing. It is of particular value in assessing blood flow and cardiac function.

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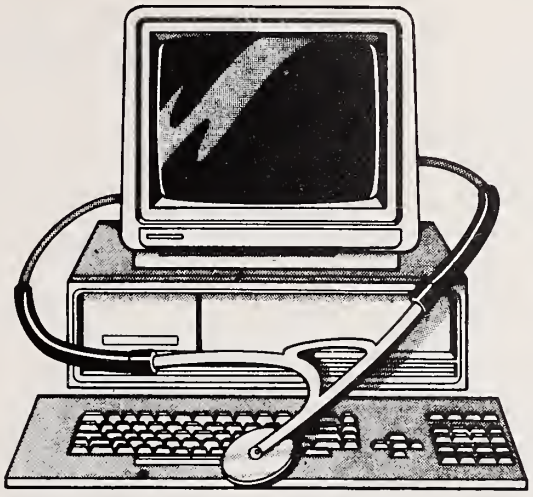
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2:00 WELCOME
William D. Logan, Jr., M.D., President
Medical Association of Georgia

2:10 ALTERNATIVE DELIVERY SYSTEMS: THEIR STATUS ACROSS THE U.S.
Boyd D. Thompson, Former Executive Vice President
American Medical Care and Review Association

2:30 UTILIZATION MANAGEMENT PROGRAMS: THEIR IMPACT ON THE PRACTICING PHYSICIAN
Cynthia Szal, Associate Director
Health Insurance Association of America

3:00 BREAK

3:30 GROWTH OF ALTERNATIVE DELIVERY SYSTEMS IN GEORGIA
Louis H. Felder, M.D.
Atlanta

4:00 THE MAG IPA: PROSPECTS FOR THE FUTURE
S. William Clark, Jr., M.D., Moderator
- Report on Participation
- Marketing Report

5:00 ADJOURN

MONDAY, FEBRUARY 3
THE LIABILITY INSURANCE CRISIS

10:00 WELCOME — Dr. Logan
10:10 THE PERSPECTIVE OF THE INSURANCE COMMISSIONER
The Honorable Warren D. Evans, Georgia Commissioner of Insurance
10:35 THE CRISIS IN GEORGIA
Robert E. Carpenter, President
Cotton States Insurance Companies
11:00 THE HIGH COST OF WRITING INSURANCE
Dan Champlin, Assistant Deputy Insurance Commissioner
- Setting Liability Insurance Rates in Georgia
- The Issue of Insurance Reserves

11:45 CIVIL JUSTICE REFORM: THE CALL TO ACTION
Warren C. Levy, Vice President-Field Service
Insurance Information Institute
12:15 LUNCH
1:30 PLANS FOR LEGISLATIVE RELIEF — WHAT OUR LEGISLATION WILL ACHIEVE
Rusty Kidd, Director of Legislative Affairs
Medical Association of Georgia
2:00 THE INSURANCE COMPANY'S PERSPECTIVE
Charles D. Hollis, Jr., M.D., President
MAG Mutual Insurance Company
2:20 THE REINSUROR'S PERSPECTIVE
John E. Mumford, A.C.I.I., Director
CNA Reinsurance of London, Limited
2:40 THE STATE LEGISLATOR'S PERSPECTIVE
The Honorable J. Crawford Ware,
State Representative
District 77 (Hogansville)
3:00 A MEDICAL LOBBYIST'S PERSPECTIVE
Donald S. Fraser, Jr., Director of Legislative Activities
Florida Medical Association
3:20 PANEL DISCUSSION
4:30 ADJOURN
6:00-7:30 RECEPTION FOR PHYSICIANS & THEIR LEGISLATORS

TUESDAY, FEBRUARY 4
MASS CAPITOL VISITATION AND PRESS CONFERENCE

8:00 CONTINENTAL BREAKFAST
9:00 DEPART FOR CAPITOL
1:00 CHECK-OUT FOR HYATT GUESTS

NEW MEMBERS

Broshears, John B., Glynn — ACT — PTH
3100 Kemble Ave., Brunswick 31520

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333 Alcova St., Monroe 30655

DeJarnette, Hugh M., Jr., Walton — ACT (N-2) — FP
333 Alcova St., Monroe 30655

Jaudon, Benjamin H., Jr., Colquitt — ACT — IM
3007 Second St., SE, Moultrie 31768

Liang, Jyh-Chwen, Dougherty — ACT — OBG
420 Fourth Ave., Albany 31701

McAvoy, J. Daniel, Elbert — ACT — FP
33 Chestnut St., Elberton 30635

Medrano, Peter P., South Georgia — ACT — P/CHP
8 Plantation Cir., Valdosta 31601

Moeller, William K., DeKalb — ACT (N-2) — ORS
487 Winn Way, Ste. 101, Decatur 30030

Shankman, Andrew S., Glynn — ACT (N-2) — P
1103 Fountain Lake Dr., Brunswick 31520

Shields, James G., Ben Hill-Irwin — ACT (N-2) — AN
Dorminy Memorial Hospital, Fitzgerald 31750

Silver, Robert C., Floyd-Polk-Chattooga — ACT — NEP
1825 Martha Berry Blvd., Rome 30161

Taylor, Paul W., Jr., Habersham — ACT — OBG
Habersham County Physicians Building, N-441, P.O. Box 578, Demorest 30535

Windham, A. Dan, Habersham — ACT — R
Habersham Hospital, Demorest 30535

PERSONALS

Fourth District

LaMar S. McGinnis, M.D., general surgeon from Decatur was elected Governor-At-Large for the state of Georgia for a 3-year term at the Annual Meeting of the Board of Governors of the American College of Surgeons. Also, at the time of the Annual Meeting of the Commission of Cancer of the College of Surgeons, Dr. McGinnis was named Vice-Chairman of the Commission for a 1-year term and Chairman of the Executive Committee. He was also elected to the Board of Directors of the American Cancer Society at its Annual Meeting in New York in November.

Fifth District

Nanette K. Wenger, M.D., Professor of Medicine (Cardiology), Emory University School of Medicine, presided at the III World Congress of Cardiac Rehabilitation in Caracas, Venezuela, in October, as President of the Scientific Council on the Rehabilitation of Cardiac Patients of the International Society and Federation of Cardiology. Also participating in the Congress were **Charles R. Hatcher, M.D.,** Professor of Cardiothoracic Surgery, Emory University School of Medicine, and Vice President for Medical Affairs of Emory University. **Gerald F. Fletcher, M.D.,** Professor of Medicine (Cardiology), in addition to chairing a session, presented "The Role of Business and Industry in the Community Phase of Cardiac Rehabilitation." Dr. Wenger also presided as President of the Interstate Postgraduate Medical Association of North America at their Seventieth Scientific Assembly meeting in November, in New Orleans.

Seventh District

Dalton family physician, **Wallace R. Weeks, M.D.,** was named a Fellow of the American Academy of Family Physicians.

Tenth District

Samuel M. Goodrich, M.D., of Milledgeville, was elected chairman of the Georgia Section of the American College of Obstetricians and Gynecologists. He will serve a 3-year term.

DEATHS

Alonzo Mills Boddie

Alonzo Mills Boddie, M.D., 61, a family practitioner of Milledgeville, died October 28. Dr. Boddie graduated from Meharry School of Medicine in Nashville in 1948. He did his internship at Hubbard Hospital in Texas and his residency in Lincoln Hospital. He was on the original staff of Baldwin County Hospital.

Survivors include two daughters, four sons, a brother, three sisters and seven grandchildren.

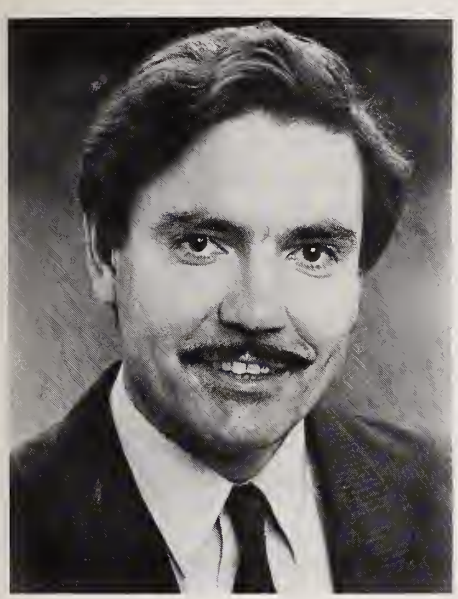
Andreas Gruentzig

Andreas Gruentzig, M.D., and his wife, Margaret Anne Thornton, M.D., died when their small plane crashed in October.

Dr. Gruentzig, whose work with balloon angioplasty was one of the most important advances in the treatment of arterial disease in the last quarter century, came to Emory University School of Medicine in the fall of 1980. He was a professor of medicine (cardiology) and radiology, and director of interventional cardiovascular medicine at Emory.

Dr. Gruentzig performed the first coronary angioplasty in September 1977 at the Medical Policlinic, University Hospital, Zurich, Switzerland. He also was one of the first physicians to perform balloon dilatation in other vessels, such as peripheral and renal arteries.

Dr. Gruentzig was born on June 25, 1939, in Dresden, Germany. He received his medical degree from the University of Heidelberg Medical School and did further training and research at other leading universities in Germany, England and Switzerland.



Andreas R. Gruentzig, M.D.

In 1983, he married Margaret Anne Thornton, of Macon, a resident in the department of radiology at Emory. Dr.Thornton was born August 23, 1956. She received her bachelor's degree, with a chemistry major, from Emory University in 1978 and her M.D. degree from Emory University School of Medicine in 1982. Dr. Thornton was a member of Omicron Delta Kappa, Mortar Board, Who's Who in American Colleges, and Outstanding Young Women of Atlanta.

Dr. Gruentzig's colleagues at Emory responded with disbelief and sorrow at the death of a man who, in the words of one of his staff, was more filled with life and vitality than anyone imaginable. Dr. J. Willis Hurst, cardiologist and chairman of the department of medicine, said that "Andreas Gruentzig was one of the most talented, creative people on the face of the earth. . . . His international impact has been enormous. We're crushed by the loss of two close friends." Dr. Garland Perdue, director of The Emory Clinic, and medical director of Emory University Hospital, said that, "We are saddened beyond words by the tragic occurrence. Andreas was a valued associate and an important contributor to The Emory Clinic. He was a brilliant and innovative teacher. His legacy of percutaneous translumninal angioplasty is one of the most important advances in the treatment of arterial disease during the last quarter of the century. We shall sorely miss his ideas and innovations and the warm and engaging person who was our friend."

QUOTES

It's an old adage that the way to be safe is never to be secure. Each one of us requires the spur of insecurity to force us to do our best.
HAROLD W. DODDS

Prosperity is a great teacher; adversity a greater.
WILLIAM HAZLITT

Lack of loyalty is one of the major causes of failure in every walk of life.
NAPOLEON HILL

Kindness: a language which the dumb can speak and the deaf can understand.
CHRISTIAN BOVEE

A man wrapped up in himself makes a pretty small parcel. But if the same man will work with and through others, there is practically no limit to his horizons.
OLIVER K. WHITING

When we do not find peace of mind in ourselves, it is useless to look for it elsewhere.
LA ROCHEFOUCAULD

To live is the rarest thing in the world. Most people exist, that is all.
OSCAR WILDE

Human behavior flows from three main sources: desire, emotion, and knowledge.
PLATO

Enjoy present pleasures in such a way as not to injure future ones.
SENECA

Beauty in things exists in the mind which contemplates them.
DAVID HUME

The longer I live the more beautiful life becomes. The earth's beauty grows on men. If you foolishly ignore beauty, you'll soon find yourself without it. Your life will be impoverished. But if you wisely invest in beauty, it will remain with you all the days of your life.
FRANK LLOYD WRIGHT

One of the most important lessons that experience teaches is that, on the whole, success depends more upon character than upon either intellect or fortune.
WILLIAM LECKY

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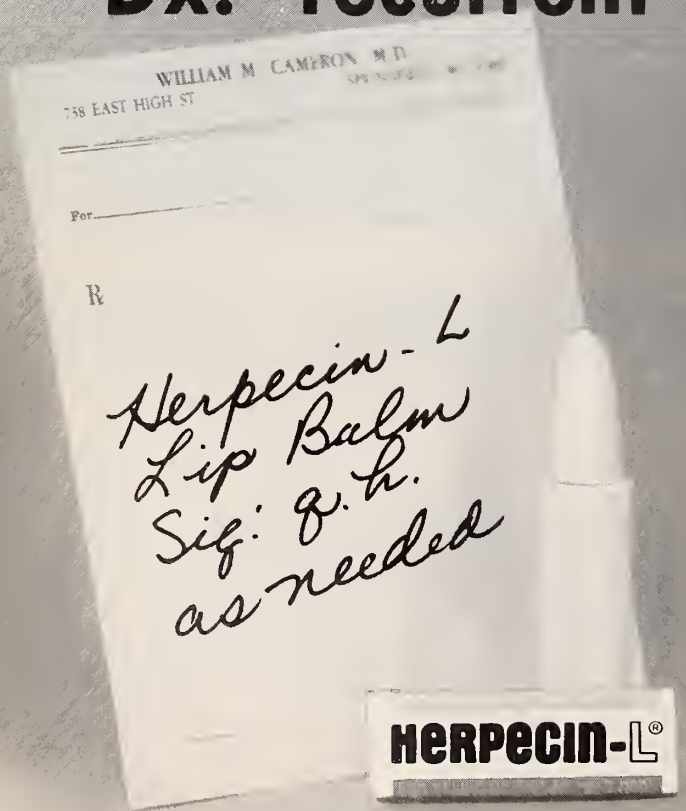
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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

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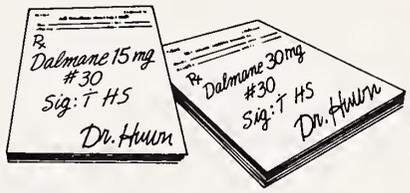
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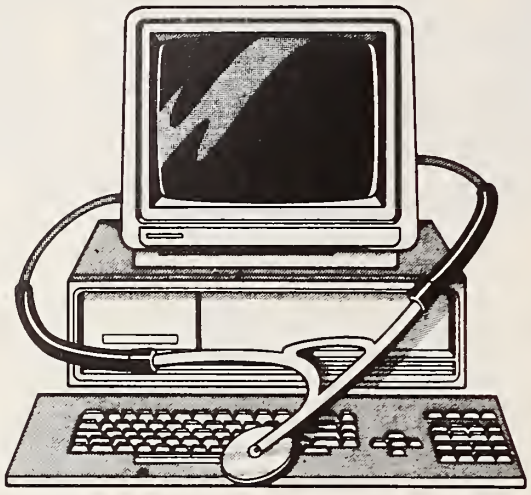
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The prevention of and rehabilitation from stroke is the focus of this special issue of the *Journal* sponsored by the American Heart Association, Georgia Affiliate.
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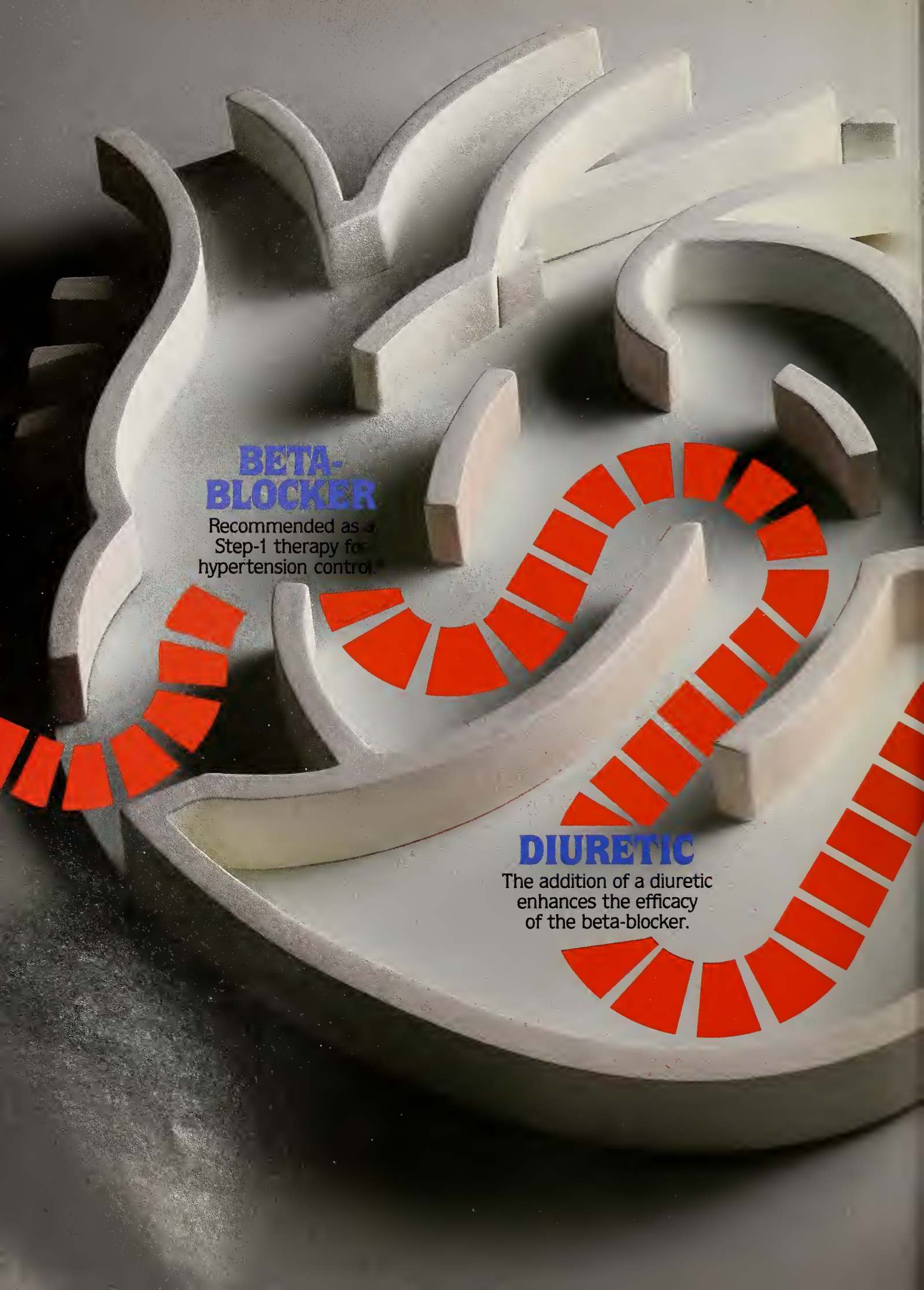
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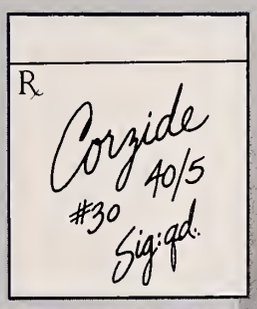
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*Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure: The 1984 report of the Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure. Arch Intern Med 144:1045-1057, 1984.

Please see brief summary of prescribing information on following page

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CORZIDE® 40/5
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Nadolol-Bendroflumethiazide Tablets

DESCRIPTION: CORZIDE (Nadolol-Bendroflumethiazide Tablets) for oral administration combines two antihypertensive agents: CORGARD® (nadolol), a nonselective beta-adrenergic blocking agent, and NATURETIN® (bendroflumethiazide), a thiazide diuretic-antihypertensive. Formulations: 40 mg and 80 mg nadolol per tablet combined with 5 mg bendroflumethiazide.

CONTRAINDICATIONS: Nadolol — Bronchial asthma, sinus bradycardia and greater than first degree conduction block, cardiogenic shock, and overt cardiac failure (see WARNINGS). **Bendroflumethiazide** — Anuria, and in those with previous hypersensitivity to bendroflumethiazide or other sulfonamide-derived drugs.

WARNINGS: Nadolol — Cardiac Failure — Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta-blockade may precipitate more severe failure. Although beta-blockers should be avoided in overt congestive heart failure, if necessary, they can be used with caution in patients with a history of failure who are well compensated, usually with digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle. IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta-blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, digitalize and/or give diuretics, and closely observe response, or discontinue nadolol (gradually, if possible).

Exacerbation of Ischemic Heart Disease Following Abrupt Withdrawal — Hypersensitivity to catecholamines has been observed in patients withdrawn from beta-blocker therapy; exacerbation of angina and, in some cases, myocardial infarction have occurred after *abrupt* discontinuation of such therapy. When discontinuing chronic use of nadolol, particularly in patients with ischemic heart disease, gradually reduce dosage over a 1- to 2-week period and carefully monitor the patient. Reinstitute nadolol promptly (at least temporarily) and take other measures appropriate for management of unstable angina if angina markedly worsens or acute coronary insufficiency develops. Warn patients not to interrupt or discontinue therapy without physician's advice. Because coronary artery disease is common and may be unrecognized, it may be prudent not to discontinue nadolol therapy abruptly even in patients treated only for hypertension.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA-BLOCKERS. Administer nadolol with caution since it may block bronchodilation produced by endogenous or exogenous catecholamine stimulation of $beta_2$ receptors. **Major Surgery** — Because beta blockade impairs the ability of the heart to respond to reflex stimuli and may increase the risks of general anesthesia and surgical procedures, resulting in protracted hypotension or low cardiac output, it has generally been suggested that such therapy should be withdrawn several days prior to surgery. Recognition of the increased sensitivity to catecholamines of patients recently withdrawn from beta-blocker therapy, however, has made this recommendation controversial. If possible, withdraw beta-blockers well before surgery takes place. In emergency surgery, inform the anesthesiologist that the patient is on beta-blocker therapy. Use of beta-receptor agonists such as isoproterenol, dopamine, dobutamine, or levarterenol can reverse the effects of nadolol. Difficulty in restarting and maintaining the heart beat has also been reported with beta-adrenergic receptor blocking agents. **Diabetes and Hypoglycemia** — Beta-adrenergic blockade may prevent the appearance of premonitory signs and symptoms (e.g., tachycardia and blood pressure changes) of acute hypoglycemia. This is especially important with labile diabetics. Beta-blockade also reduces release of insulin in response to hyperglycemia; therefore, it may be necessary to adjust dose of antidiabetic drugs. **Thyrotoxicosis** — Beta-adrenergic blockade may mask certain clinical signs (e.g., tachycardia) of hyperthyroidism. To avoid abrupt withdrawal of beta-adrenergic blockade which might precipitate a thyroid storm, carefully manage patients suspected of developing thyrotoxicosis.

Bendroflumethiazide — Use with caution in severe renal disease. In patients with renal disease, azotemia may be precipitated. With impaired renal function, effects of the drug may be cumulative. Use with caution in impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. Possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS: General — Nadolol — Use with caution in patients with impaired hepatic or renal function (see DOSAGE AND ADMINISTRATION).

Bendroflumethiazide — At appropriate intervals, perform serum electrolytes determination to detect possible electrolyte imbalance warning signs of which are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and G.I. disturbances such as nausea and vomiting. Observe patients for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Drugs such as digitalis may influence serum electrolytes. Hypokalemia may develop, especially with brisk diuresis, in presence of severe cirrhosis. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Response of the heart to toxic effects of digitalis can be exaggerated with hypokalemia. Use potassium supplements such as high potassium foods to avoid or treat hypokalemia. Any chloride deficit is generally mild and usually does not require specific therapy except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction rather than salt administration except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain thiazide-treated patients. Latent diabetes mellitus may become manifest during thiazide therapy. Antihypertensive effects of bendroflumethiazide may be enhanced in the postsympathectomy patient.

Careful reappraisal of therapy and consideration given to withholding or stopping diuretic therapy is necessary if rising nonprotein nitrogen or BUN (indicative of progressive renal impairment) occurs. Thiazides may decrease serum PBI levels without signs of thyroid disturbance. Thiazides decrease calcium excretion. Pathologic changes in parathyroid gland with hypercalcemia and hypophosphatemia have been occasionally observed with prolonged therapy. Common complications of hyperparathyroidism have not been seen.

Information for Patients — Warn patients, especially those with evidence of coronary artery insufficiency, against interruption or discontinuation of nadolol without physician's advice. Although cardiac failure rarely occurs in properly selected patients, advise patients being treated with beta-adrenergic blocking agents to consult physician at the first sign or symptom of impending failure. Advise patients of proper course if dose inadvertently missed.

Laboratory Tests — Regularly monitor serum and urine electrolyte levels (see WARNINGS, *Bendroflumethiazide,* and PRECAUTIONS, *General, Bendroflumethiazide).*

Drug Interactions — Nadolol — When administered concurrently the following drugs may interact with beta-adrenergic blocking agents: **Anesthetics, general** — exaggeration of anesthetic-induced hypotension (see WARNINGS, *Nadolol, Major Surgery).* **Antidiabetic drugs (oral agents and insulin)** — hypoglycemia or hyperglycemia; adjust antidiabetic drug dosage accordingly (see WARNINGS, *Nadolol, Diabetes and Hypoglycemia).* **Catecholamine-depleting drugs (e.g., reserpine)** — additive effect; monitor closely for evidence of hypotension and/or excessive bradycardia.

Bendroflumethiazide — When administered concurrently the following drugs may interact with thiazide diuretics: **Alcohol, barbiturates, or narcotics** — may potentiate orthostatic hypotension. **Antidiabetic drugs (oral agents and insulin)** — thiazide-induced hyperglycemia may require adjustment of antidiabetic drug dosage. **Other antihypertensive drugs** — additive or potentiated effect. **Corticosteroids, ACTH** — intensified electrolyte depletion, particularly hypokalemia. **Ganglionic or peripheral adrenergic blocking drugs** — potentiated effect. **Preanesthetic and anesthetic agents** — effects may be potentiated; adjust dosage accordingly. **Pressor amines (e.g., norepinephrine)** — possible decrease response but not sufficient to preclude their use. **Skeletal muscle relaxants, nondepolarizing (e.g., tubocurarine)** — possible increased response.

Drug/Laboratory Test Interactions — Discontinue thiazides before tests for parathyroid function (see PRECAUTIONS, *General, Bendroflumethiazide).*

Carcinogenesis, Mutagenesis, Impairment of Fertility — Nadolol — In 1 to 2 years oral toxicologic studies in mice, rats, and dogs, nadolol did not produce significant toxic effects. In 2-year oral carcinogenic studies in rats and mice, nadolol did not produce neoplastic, preneoplastic, or nonneoplastic pathologic lesions. **Bendroflumethiazide** — Long-term studies in animals have not been performed.

Pregnancy — Teratogenic Effects — Nadolol — Category C. In animal reproduction studies with nadolol, evidence of embryo- and fetotoxicity was found in rabbits, but not in rats or hamsters, at doses 5 to 10 times greater (on a mg/kg basis) than the maximum indicated human dose; no teratogenic potential was seen in any of these species. There are no well-controlled studies in pregnant women; therefore, use nadolol in pregnant women only if potential benefit justifies potential risk to the fetus. **Bendroflumethiazide** — Category C. Animal reproduction studies have not been conducted. This drug's effect on the fetus when administered to a pregnant woman or its effect on reproductive capacity is not known. Bendroflumethiazide should be given to a pregnant woman only if clearly needed. **Nonteratogenic Effects** — Since thiazides cross the placental barrier and appear in cord blood, weigh anticipated benefit of the drug in pregnant women against possible hazards to the fetus; these hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other reactions which have occurred in adults.

Nursing Mothers — Both nadolol and bendroflumethiazide are excreted in human milk. Because of the potential for serious adverse reactions in nursing infants either discontinue nursing or discontinue therapy, taking into account the importance of CORZIDE (Nadolol-Bendroflumethiazide Tablets) to the mother.

Pediatric Use — Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: Nadolol — Most adverse effects have been mild and transient and have rarely required nadolol withdrawal. **Cardiovascular** — Bradycardia with heart rates of less than 60 beats per minute occurs commonly, and heart rates below 40 beats per minute and/or symptomatic bradycardia were seen in about 2 of 100 patients. Symptoms of peripheral vascular insufficiency, usually of the Raynaud type, have occurred in approximately 2 of 100 patients. Cardiac failure, hypotension, and rhythm/conduction disturbances have each occurred in about 1 of 100 patients. Single instances of first degree and third degree heart block have been reported; intensification of AV block is a known effect of beta-blockers (see also CONTRAINDICATIONS, WARNINGS, and PRECAUTIONS). **Central Nervous System** — Dizziness or fatigue reported in approximately 2 of 100 patients; paresthesias, sedation, and change in behavior reported in approximately 6 of 1000 patients. **Respiratory** — Bronchospasm reported in approximately 1 of 1000 patients (see CONTRAINDICATIONS and WARNINGS). **Gastrointestinal** — Nausea, diarrhea, abdominal discomfort, constipation, vomiting, indigestion, anorexia, bloating, and flatulence each reported in 1 to 5 of 1000 patients. **Miscellaneous** — Each of the following reported in 1 to 5 of 1000 patients: rash; pruritus; headache; dry mouth, eyes, or skin; impotence or decreased libido; facial swelling; weight gain; slurred speech; cough; nasal stuffiness; sweating; tinnitus; blurred vision. Although relationship to drug usage is not clear, sleep disturbances have been reported. The oculomucocutaneous syndrome associated with practolol has not been reported with nadolol. The following adverse reactions may also occur: **Central Nervous System** — reversible mental depression progressing to catatonia; visual disturbances, hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss; emotional lability with slightly clouded sensorium, decreased performance on neuropsychometrics. **Gastrointestinal** — mesenteric arterial thrombosis; ischemic colitis. **Hematologic** — agranulocytosis; thrombocytopenic or nonthrombocytopenic purpura. **Allergic** — fever combined with aching and sore throat; laryngospasm; respiratory distress. **Miscellaneous** — reversible alopecia; Peyronie's disease; erythematous rash; arterial insufficiency.

Bendroflumethiazide — Gastrointestinal System — anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis. **Central Nervous System** — dizziness, vertigo, paresthesia, headache, xanthopsia. **Hematologic** — leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia. **Dermatologic-Hypersensitivity** — purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis). **Cardiovascular** — orthostatic hypotension may occur. **Other** — hyperglycemia, glycosuria, occasional metabolic acidosis in diabetics, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, restlessness. Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

OVERDOSAGE: Nadolol may cause excessive bradycardia, cardiac failure, hypotension, or bronchospasm if overdosed. Overdosage of thiazides may cause lethargy, which may progress to coma within a few hours, with minimal depression of respiration and cardiovascular function and without evidence of serum electrolyte changes or dehydration. Gastrointestinal irritation and hypermotility may occur. Transitory increase in BUN and serum electrolyte changes may occur, especially in patients with renal impairment.

Treatment — Nadolol can be removed from the general circulation by hemodialysis. In determining duration of corrective therapy, take note of the long duration of the effect of nadolol. In addition to gastric lavage, employ the following measures, as appropriate. **Excessive Bradycardia** — Administer atropine (0.25 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously. **Cardiac Failure** — Administer a digitalis glycoside and diuretic. It has been reported that glucagon may also be useful in this situation. **Hypotension** — Administer vasopressors, e.g., epinephrine or levarterenol. (There is evidence that epinephrine may be the drug of choice.) **Bronchospasm** — Administer a $beta_2$-stimulating agent and/or a theophylline derivative. **Stupor or Coma** — Supportive therapy as warranted. **Gastrointestinal Effects** — Symptomatic treatment as needed. **BUN and/or Serum Electrolyte Abnormalities** — Institute supportive measures as required to maintain hydration, electrolyte balance, respiration, and cardiovascular and renal function.

DOSAGE AND ADMINISTRATION: DOSAGE MUST BE INDIVIDUALIZED. Patients with renal failure require adjustment in dosing interval; see package insert for dosage in these patients.

Consult package insert before prescribing CORZIDE (Nadolol-Bendroflumethiazide Tablets).

HOW SUPPLIED: Available as scored tablets containing 40 mg nadolol combined with 5 mg bendroflumethiazide and 80 mg nadolol combined with 5 mg bendroflumethiazide in bottles of 100.

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References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study.[1]

Increases exercise tolerance*
In Bruce exercise test,[2] control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P<.005$).

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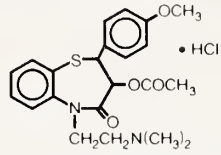
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PROFESSIONAL USE INFORMATION

cardizem®
(diltiazem HCl)
30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the intlux of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms ot its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation ot the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses ot up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg ot CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure trom dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60 mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use ot CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufticient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo theraoy

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LOH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia, and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician

The oral/LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CAROIZEM therapy.
2. **Prophylactic Nitrate Therapy** – CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NOC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles ot 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

Issued 4/1/84

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The Heart of Medicine



William D. Logan, Jr., M.D.

A few years ago an Atlanta physician and his wife were walking toward the Capital City Club one Sunday morning for lunch. They passed a couple of "ladies of the night" on Peachtree Street. One of the them recognized and spoke knowingly to the doctor. He responded with a courteous reply. As they proceeded the doctor's wife said, somewhat accusingly, "Doctor, that women spoke as if she knew you."

"Yes, yes," the doctor quickly replied, 'I know her professionally.'

"Oh, I understand, doctor," replied his wife and, then teasingly added, "but by whose profession?"

This little story implies there is a difference in professions, and I certainly hope so. Some of the happenings these days makes me worry. It has been said that "every man has his price." Perhaps this is true, but I prefer to feel there is more than that to our medical profession. In addition to price, there is a sense of being correct to the best of one's ability, openness, and trust between patient and doctor, and a degree of caring seldom seen elsewhere.

Recent reports reveal increasing corporate involvement in medicine. Forty percent of the young doctors under the age of 40 work for a company or are employed by someone else. There may be nothing wrong with this and could be only a sign of the times. It does concern me, however. I can only hope the other factors are not left by the wayside in this "business" part of medicine.

The striving for excellence, personal honesty, and concern most often comes from the heart. Let's don't forget them. February is Heart Month. Shall we all take time to rededicate ourselves to the heart *of medicine? If we do, there can never be any reason to confuse our profession with any other.*

Wm. D Logan Jr.

LETTERS

Dear Editor:

I like the new format of the *Journal*. It meets the stated objectives very nicely. Congratulations.

I like the quotes section and hope it will be a regular feature.

Sincerely,
Garland D. Perdue, M.D.
Clinic Director
The Emory Clinic
Atlanta

Dear Editor:

After seeing the last two issues of your magazine, I want to congratulate you for making an excellent publication even better. Your new design gives the *Journal* a contemporary and distinctive look.

And your November cover was incredible. Not only was it an arresting image, but the simple beauty of the human form drives home a very important emotional aspect of breast cancer — the patient's fear of disfigurement.

This was far-and-away the most effective illustration I've seen for this very sensitive topic.

Sincerely,
Cullen Clark
Managing Editor
Cincinnati Medicine

Dear Editor:

In this time when it seems so important that physicians attempt to maintain some dignity and a high degree of professionalism, I do not interpret the new direction that the *Journal* has taken to be in sympathy with this concept. The *Journal* need not be into media concerns nor into marketing medical information to doctors. Conscientious physicians have always seen to their continuing medical education without the need for come ons, gimmicks, or enticements. The *Journal* should present worthy, current professional information in an organized and respectable fashion. The dramatics can be left in the advertisements, where they are already abundant enough. Have you checked the *New England Journal of Medicine* lately? I would be interested in the sentiments of the great silent majority.

Very Sincerely,
Paul W. Black, M.D.
Plastic Surgeon,
Atlanta

Dear Editor:

The November issue of the *Journal* arrived today. It's beautiful! Congratulations on the "one giant step." I love it. Your readers will, too.

Sincerely,
Dianne Bricker
Director of Communications
Medical Society of the District of Columbia

Dear Editor:

I read the recent article "Preliminary Breast Biopsy" by Dr. Robert H. Johnson, Jr., (November, 1985, *Journal*, pp. 756-757) and feel that he neglected a very important method for diagnosis of breast lesions. He only mentions surgical biopsies and failed to mention a very simple and efficient method of diagnosis, i.e., fine needle aspiration biopsy cytology. Dr. Johnson mentions many of the complications of incisional biopsy. Fine needle aspiration avoids a great many of these complications and still allows for diagnostic material to be obtained. Even though the procedure is limited to palpable lesions, the use of fine needle aspiration has been found to be a very useful and cost efficient method of diagnosis. If there is some question as to whether a mass is malignant after aspiration cytology is performed, a frozen section can be performed before continuing with definitive therapy. In addition, the aspiration biopsy can be performed in the office or on an outpatient basis with a rapid diagnosis given by the pathologist. This in turn decreases cost to the patient and also may decrease anxiety if a benign diagnosis is given.

As no procedure is perfect, the findings of a negative aspirate do not always rule out the possibility of carcinoma still being present, particularly in a very suspicious clinical lesion. However, in these days of cost cut-backs and government regulations, the method is a very efficient use of patients' dollars. It also gives the patient less morbibity, has few complications, and does not distort the tissue if further study is needed.

Sincerely
R. Michael McCormac, M.D.
Pathologist
Northeast Georgia Medical Center
Gainesville

Dear Editor:

I just wanted to congratulate you on the new format of the *Journal*. It's certainly a marked improvement, and the last several covers have been outstanding.

I am very impressed with the January, 1986, cover and would love to purchase a copy of this photograph if it is available. Thank you so much for your dedicated work on behalf of the Association and the many years you have devoted to the *Journal*.

Sincerely,
Paul E. Cundey, Jr., M.D.
Augusta

CALENDAR

FEBRUARY

15 — *Savannah:* **Georgia Obstetrical-Gynecological Society Risk Management Seminar.** Category 1 credit. Contact James Moffett, Dir. of Specialty Society Relations, MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

17-21 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

22-23 — *Augusta:* **Georgia Society of Anesthesiologists.** Category 1 credit. Contact William Hammonds, MD, Secy-Treas., GSA, Emory Univ. Hosp., Dept. of Anesth., 1365 Clifton Rd., NE, Atlanta 30322. PH:404/321-0111.

26-March 2 — *San Juan, PR:* **The Eighth Annual Pediatric Postgraduate Course.** AMA Category 1 and AAFP prescribed credits. Contact Judson L. Hawk, Jr., MD, Scottish Rite Children's Hosp., 1001 Johnson Ferry Rd., Atlanta 30363. PH:404/257-2040.

27-28 — *Atlanta:* **Sports Nutrition Conference.** Contact Jana R. Kicklighter, Ph.D., R.D., Dept. of Nutrition and Dietetics, Box 873, Univ. Plaza, Ga. State Univ., Atlanta 30303. PH:404/658-3085.

28 — *Atlanta:* **Cancer Update: Focus on Nutrition.** Category 1 credit. Contact Janet Bonfiglio, RN, American Cancer Society, 1422 W. Peachtree St., Atlanta 30309. PH:404/892-0026.

MARCH

1 — *Savannah:* **GAFP Risk Management Seminar.** Category 1 credit. Contact James Moffett, Dir. of Specialty Society Relations, MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

3-8 — *Augusta:* **21st Annual Family Practice Symposium.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

7 — *Columbus:* **Prevention, Screening and Early Detection of Cancer.** Category 1 credit. Contact John T. West, MD, 301 Medical Dr., LaGrange 30240. PH:404/882-8128.

8-15 — *Copper Mountain, CO:* **XI Annual Snow Job in Gynecology and Obstetrics.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

9-13 — *Atlanta:* **American College of Cardiology 35th Annual Scientific Session.** Category 1 credit. Contact ACC, Attn: Meeting Services, 9111 Old Georgetown Rd., Bethesda, MD. 20814. PH:301/897-5400.

10-14 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

11-16 — *Park City, Utah:* **Modern Dissection Techniques of Bone, Biometals, and Bioplastics.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

12-13 — *Augusta:* **Gynecologic Oncology.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

13 — *Macon:* **Cancer Management: Update 1986.** Category 1 credit. Contact Milford B. Hatcher, MD., 781 Spring St., Macon 31201. PH:912/742-2383.

17-18 — *Atlanta:* **Pharmacology for the Anesthesiologist.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

17-21 — *Park City Utah:* **Snowplow Orthopaedics with Special Emphasis on Common Musculoskeletal Pain Problems.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

21-22 — *Augusta:* **Flexible Fiberoptic Sigmoidoscopy.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

24-26 — *Atlanta:* **Annual Pediatric Postgraduate Course.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

28-29 — *Callaway Gardens:* **6th Annual Geriatric Conference for Primary Care Physicians.** Contact Dept. of Fam. Pract., Medical Ctr., P. O. Box 951, Columbus 31994. PH:404/511-1337.

31-April 4 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

APRIL

4-5 — *Atlanta:* **American Association of Public Health Physicians.** Contact John Dowling, MD, Secy-treas., Nassau Co. Health Dept., 240 Old Country Rd., Mineola, Long Island, NY 11501. PH:516/535-2260.

4-5 — *Atlanta:* **1st Annual Interdisciplinary Conference on Hypertension.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5696.

5 — *Brunswick:* **Diagnosis and Prevention of Cancer.** Category 1 credit. Contact Glynn Brunswick Mem. Hosp., 3100 Kemble Ave., Box 1518, Brunwick 31520. PH:912/264-6960.

12 — *Atlanta:* **Electronic Fetal Monitoring.** Category 1 credit. Contact American College of Obstetricians and Gynecologists, 600 Maryland Ave., SW, Washington, D.C. 20024. PH:202/638-5577.

19-20 — *Atlanta:* **The Cardiac Patient: Management for Cardiopulmonary Bypass.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.



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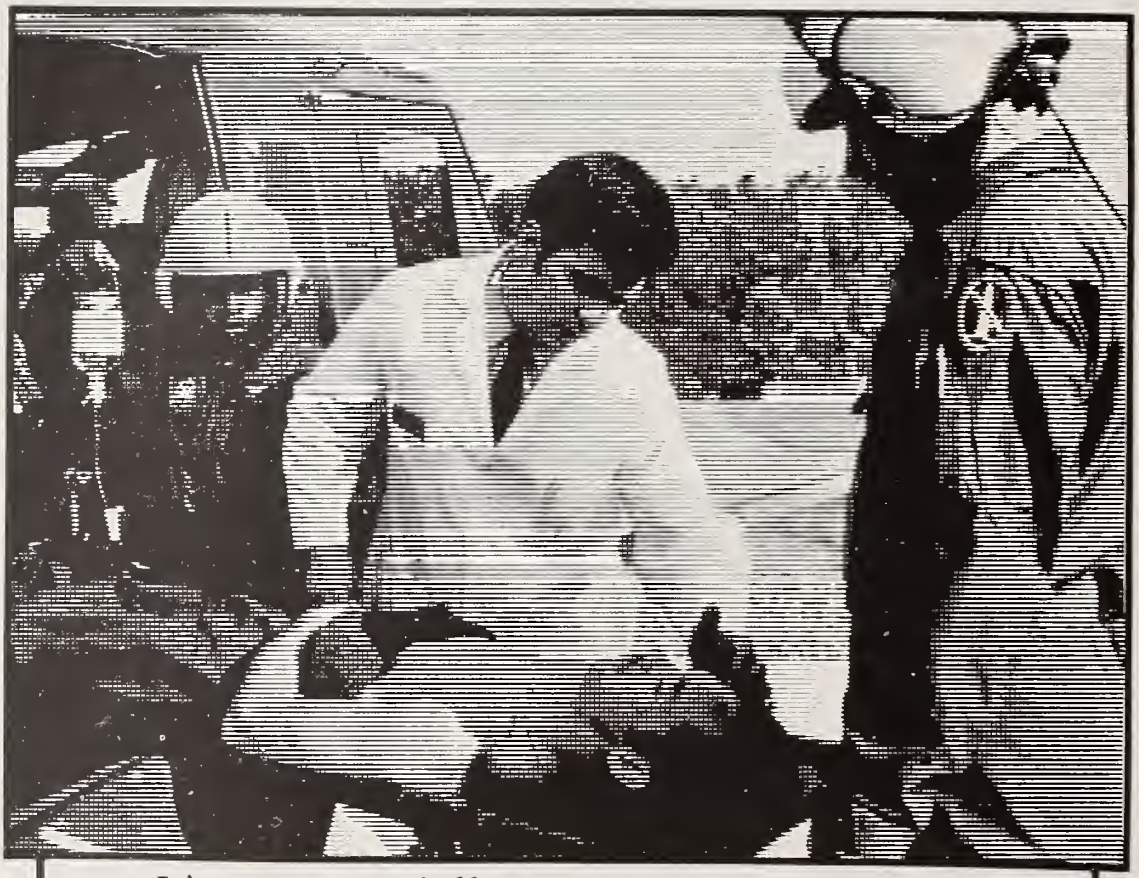
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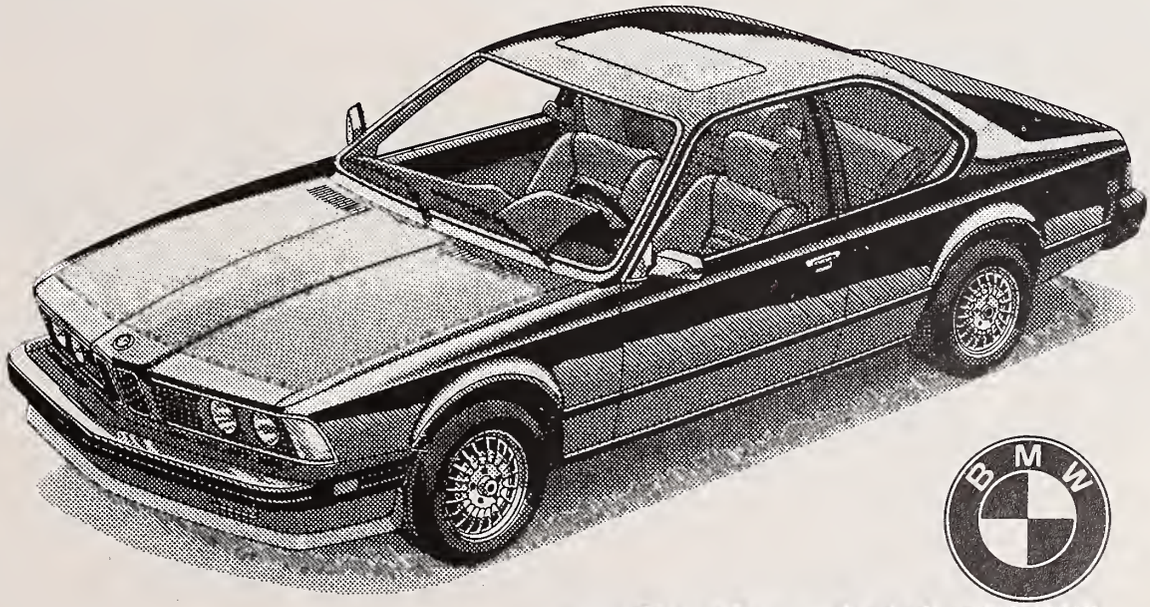
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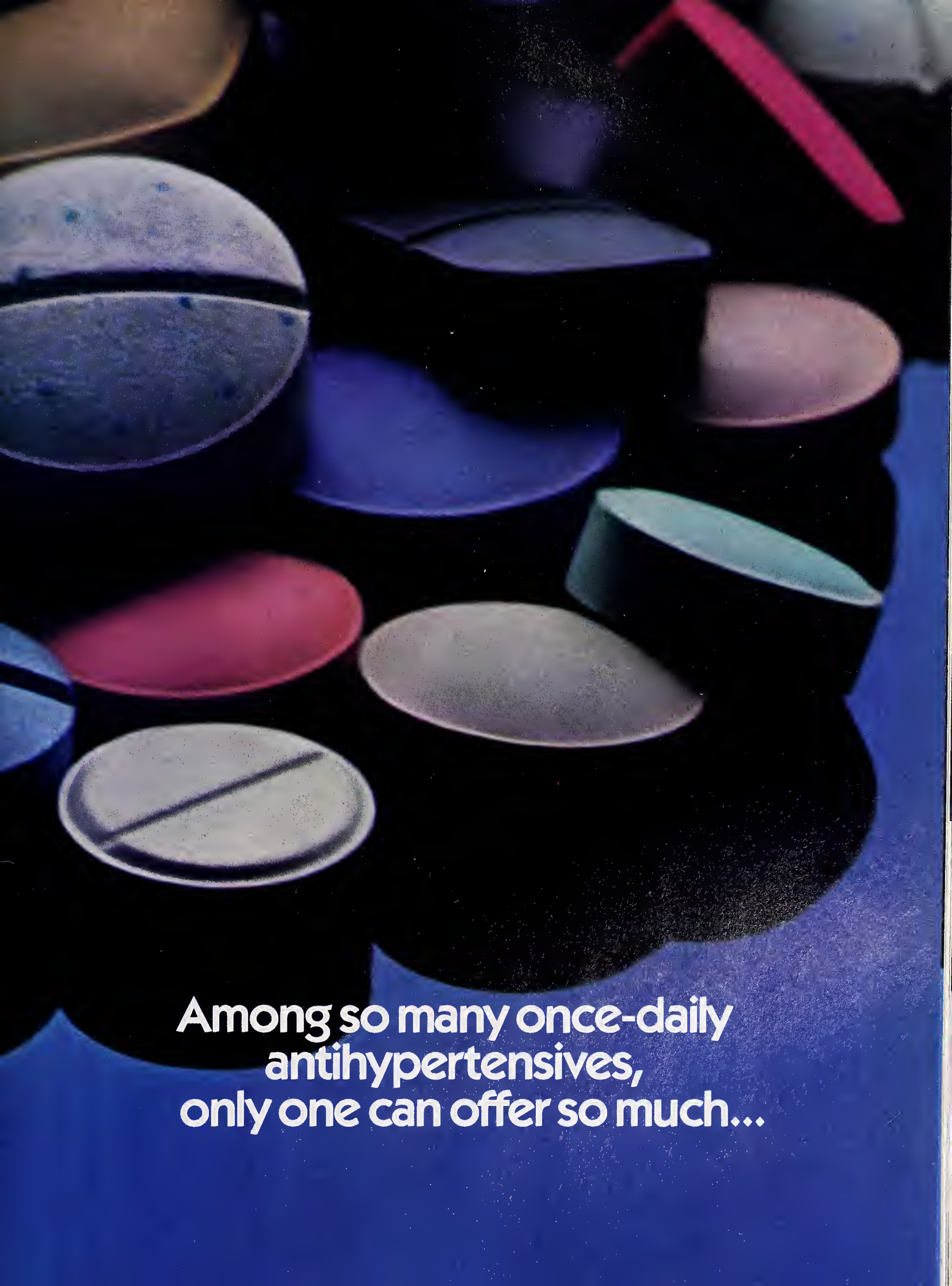


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The controlled-release delivery system of INDERIDE LA provides 24-hour beta blockade and the broad cardiovascular benefits of INDERAL with a single daily dose. Compliance is enhanced because once-daily administration fits easily into patients' daily routines.

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New once-daily INDERIDE® LA

Each capsule contains propranolol HCl (INDERAL® LA) 80 mg, 120 mg, or 160 mg, and hydrochlorothiazide, 50 mg

Convenience without compromise



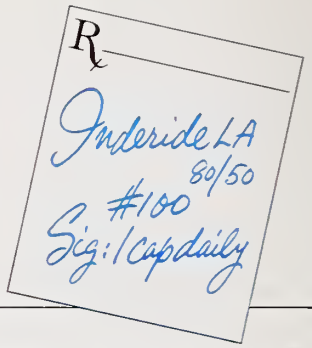
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Please see following page for brief summary of prescribing information.

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One capsule—Once daily





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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*

INDERIDE® LA Brand of **PROPRANOLOL HYDROCHLORIDE (INDERAL® LA) and HYDROCHLOROTHIAZIDE (Long Acting Capsules)**

No. 455—Each INDERIDE® LA 80/50 Capsule contains:
Propranolol hydrochloride (INDERAL® LA) 80 mg
Hydrochlorothiazide 50 mg

No. 457—Each INDERIDE® LA 120/50 Capsule contains:
Propranolol hydrochloride (INDERAL® LA) 120 mg
Hydrochlorothiazide 50 mg

No. 459—Each INDERIDE® LA 160/50 Capsule contains:
Propranolol hydrochloride (INDERAL® LA) 160 mg
Hydrochlorothiazide 50 mg

INDERIDE LA is indicated in the management of hypertension.

This fixed-combination drug is not indicated for initial therapy of hypertension. If the fixed combination represents the dose titrated to the individual patient's needs, therapy with the fixed combination may be more convenient than with the separate components.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL®):
Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide:
Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL®):
CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patients should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide:
Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL®):
GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide:
GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL®):
Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes, dry eyes; male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:
Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia, agranulocytosis; thrombocytopenia, aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura, photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm; weakness, restlessness, transient blurred vision.

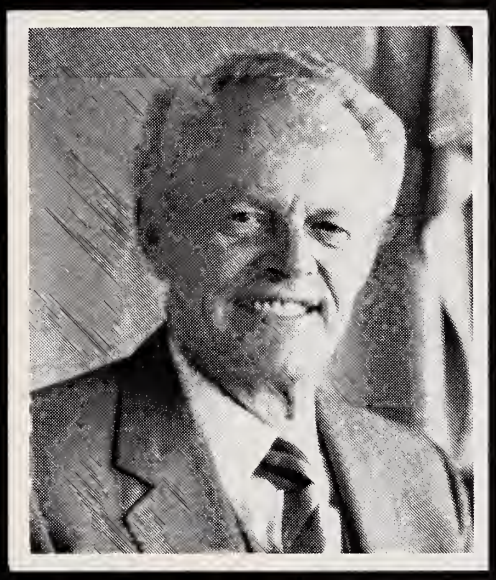
Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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Stroke in Georgia

"This special issue offers an historical background of stroke in Georgia, an overview of current diagnosis and management guidelines, and pragmatic recommendations for stroke patients and their families."

Approximately 300-500,000 new cases of stroke occur each year in the United States. The overall hospital fatality rate is 31 percent, and the national direct care costs exceed three billion dollars. The risk of stroke is higher in patients with diabetes, hypertension, or atrial fibrillation. Stroke is more common in men than women and in blacks than whites. In Georgia, the death rate from stroke is higher in the rural areas of the state. Approximately 40,000 of our 5.5 million residents are stroke survivors.

The good news is that the number of stroke fatalities is declining nationally at a remarkable rate (i.e., about 42% between 1969-1981). In Georgia, stroke mortality declined 35% between 1971-1981 (i.e., from 124.3 to 80.8 per 100,000). This striking improvement could be related to better overall medical and surgical care, the development of rehabilitation programs, technical advances in radiologic imaging procedures, and more aggressive detection and treatment of high blood pressure. It could also relate to the national trend of less cigarette smoking, more exercise, a 39% reduction in saturated fat intake, and a reduction from 800 to 500 mg in the average American intake of cholesterol. (Even 500 mg still exceeds the Heart Association's recommendations of less than 300 mg cholesterol daily for men and 225 mg for women.)

Special groups interested in stroke (e.g., stroke clubs and other volunteer groups) have emerged. In 1983, the Georgia Affiliate of the American Heart Association created a Stroke Task Force as a special working group of the High Blood Pressure Committee. During 1983-85, many Heart Association volunteers* worked hard to gather data, review materials, and provide direction for a variety of stroke programs across the state. Much of these data are incorporated into this special issue of the *Journal*. We hope that you enjoy the historical background of stroke in Georgia, the overview of current diagnosis and management guidelines, and the pragmatic recommendations provided for the stroke patient and his or her family.

W. Dallas Hall, M.D.
Past President
Georgia Affiliate
American Heart Association

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**Key Heart Association Volunteers: Marvin Brooke, Dorothy Cohen (Chairman, 1984-85), Lisa Collis, Cynthia Dozier, Sandra Dennett, Frank Greenberger, Jane Greenberger, Charles Hackney, Cecil Harbin, Nancy Hickey, Herbert Karp, Jane McCombs (Chairman, 1983-84 and 1985-86), Mary Marshall, Noble Masseur, Mary Parris, Barbara Payne, and Pat Szucs.*

THE HISTORICAL BACKGROUND OF STROKE PREVENTION, TREATMENT, AND REHABILITATION IN GEORGIA

J. GORDON BARROW, M.D., JAMES C. METTS, M.D.

Georgia has played a significant role in this century in the development of the understanding of cardiovascular disease and in the prevention and treatment of high blood pressure and stroke.

Prevention and Treatment

THE FACT that high blood pressure is the primary risk factor in stroke dictates that an overview of the history of stroke in Georgia begins with a man who was important to both the discovery of blood pressure and the founding of the Georgia Colony. The Reverend Stephen Hales of England was a trustee of the Georgia Colony. He worked closely with Georgia's Founder, James Oglethorpe, in 1732 to organize the Crown's new world territory. In that same year, Hales' interest in science led him to the discovery of blood pressure which he described in his 1733 publication "Haemostaticks."[1]

For the next 200 years, there was little or no understanding of blood pressure and its relationship to health and disease. It is difficult for most of us to comprehend that the prevention, treatment, and rehabilitation of stroke was not even seriously discussed until the 1950s. As late as 1945 when President Franklin D. Roosevelt died in Warm Springs, Georgia, of a stroke (massive brain hemorrhage), his physicians were not treating him for his blood pressure, recorded on the morning of his death at an alarming 300/190.[2]

In the twentieth century, Georgians played a significant role in the development of the understanding of cardiovascular disease. The intellectual concept of alpha/beta adrenoreceptors was the brainchild of Dr. Raymond Ahlquist of the Medical College of Georgia. This remarkable insight was not fully appreciated until the 1960's development of beta blockers although it was conceived 12 years earlier.[3]

Dr. Barrow practices cardiology in Winston and Dr. Metts practices internal medicine in Savannah. Send reprint requests to Stroke Subcommittee, American Heart Assoc., Georgia Affiliate, 2581 Piedmont Rd., P.O. Box 13589, Atlanta, GA 30324.

In the early 1950s, Dr. G. W. Comstock conducted the first epidemiologic study of high blood pressure in blacks and whites in Muscogee County, Georgia. He established mean blood pressure levels and noted the rise in blood pressure with age, especially in blacks.[4]

As more and more studies began to demonstrate the morbid effects of untreated high blood pressure, Georgians continued to play an important role, especially in the 1960s. In 1961, Dr. Curtis Hames (et al.) of Claxton, Georgia, published the first of the now famous Evans County Heart Studies demonstrating racial differences in hypertension, increased mortality of hypertensives, and the significance of other risk factors in cardiovascular disease.[5] Indeed, even today the continuing Evans County Studies are considered the textbook example of rural epidemiologic studies.

In 1964, Dr. Joseph A. Wilber conducted a community-wide hyper-

tension intervention survey in Baldwin County, Georgia, demonstrating that professional intervention and follow-up could be successful in assisting hypertensives in controlling blood pressure.[6]

In the late 1960s and early 1970s, the gap between basic and applied research was closed by a joint effort that culminated in mass public blood pressure screening and education programs in Savannah, Georgia. Under the leadership of Dr. James C. Metts and Dr. John L. Elliott, with the support of the Centers for Disease Control (Dr. Carroll B. Quinlan), 25,000 citizens of Chatham County were screened for high blood pressure and other cardiovascular risk factors utilizing medical and lay volunteers.[7]

The 1972 screening, a radical idea at the time, demonstrated that three out of ten people in Chatham County had an elevated blood pressure that threatened their health and longevity, a truly "silent epidemic." If three out of a thousand has AIDS, there would be panic in the streets, but three out of ten with another lethal condition was regarded with insouciance.

Armed with undeniable data in the mid-70s, Georgia was one of the first states to institute community-based programs for prevention and treatment of high blood pressure and stroke. Using the Savannah Community Cardiovascular Council as a model, Dr. Joseph Wilber and Dr. Carroll Quinlan organized a statewide high blood pressure program under the newly formed Department of Human Resources. This continued into the 1980s and is very active today.

Georgia also continued to play an important role in research in the 1970s. Two of fourteen sites in the U. S. Hypertension and Detection Follow-up Program were in Georgia: an urban setting in Atlanta (Dr. Neil B. Shulman and Dr. Elbert P. Tuttle, Emory) and a rural setting in Evans County (Dr. Curtis Hames). This study was the cornerstone of the noted reduction in mortality for mild hypertensives (DBP 90-104 mmHg), providing that long term therapy benefitted this group.[8]

Georgia's most recent contribution to the prevention and treatment of high blood pressure and stroke occurred in the 1980s. Under the Department of Human Resources' Project FOCUS, a 5-year program, the coordination of community resources throughout the state was shown to be an effective tool in morbidity and mortality reduction of cardiovascular disease.[9] Emory (Dr. W. Dallas Hall) is one of the current 17 national centers involved in a 5-year study of isolated systolic hypertension in the elderly (SHEP).

During the 40-year period from President Roosevelt's stroke death to today's multi-faceted approach to cardiovasular disease, Georgians have proudly played an important role in both basic and applied research in the prevention and treatment of cardiovascular disease.

The Significance of the Savannah Experience

The overall significance of the Savannah experience in the prevention and treatment of stroke was that it demonstrated that the basic research concepts of high blood pressure control and risk factor modification could be successfully applied to the mass population through broadly structured community programs.

Historically, interest in high blood pressure and stroke was initiated in the mid to late '60s by the medical profession, especially Dr. John L. Elliott and the Georgia Medical Society. At Dr. Elliott's urging, Dr. James C. Metts and Candler General Hospital (President Robert Marsh) began a series of meetings in 1967-69 to address the growing alarm over high blood pressure and stroke in the coastal area.

As data became available from Dr. Lewis Kuller's Collaborative Community Stroke Study (CCSS) in 1969, Savannah was shown to have a stroke death rate that was three times higher than the estimated national average.[10] The CCSS confirmed that indeed there was a real geographic difference in cardiovascular disease rates and that the coastal plains of Georgia, South Carolina, and North Carolina had a disproportionate number of morbid events.[11] With unequivocal evidence that there were geographic variations in the incidence of stroke, a coalition of interested individuals and agencies united to mount an organized effort to alter the cardiovascular disease patterns in the coastal area.

"The overall significance of the Savannah experience in the prevention and treatment of stroke was that it demonstrated that the basic research concepts of high blood pressure control and risk factor modification could be successfully applied to the mass population through broadly structured community programs."

In 1969, the Georgia Regional Medical Program (Dr. Gordon Barrow), Georgia Department of Public Health (Dr. Joseph Wilber), the Centers for Disease Control (Dr. Carroll Quinlan), and the Georgia Medical Society (Dr. John L. Elliott) under the sponsorship of Candler General Hospital (Mr. Robert Marsh) united to form the Community Cardiovascular Council (CCC) (Dr. James Metts). Others that participated were Dr. Tom Swift, Dr. Tom Freeman, Dr. Ed Filson, and many interested agencies in Chatham County.

After considerable discussion over a long period of time, the group decided to take bold and radical steps to: (1) screen and detect as many hypertensives as possible; (2) strongly encourage treatment of discovered hypertensives; and (3) educate the public as to the consequences of untreated hypertension and other risk factors. The group was aware that at this time blood pressure measurement was somewhat esoteric, and most

“Georgia was one of the first states to institute community-based programs for prevention and treatment of high blood pressure and stroke.”

physicians did not share blood pressure readings with the patient.

When mass public screenings began in 1972, the CCC was subjected to bitter criticism for “making people nervous” about having elevated blood pressure. As time would have it, being nervous about having high blood pressure has been proven to be the best chance of survival for 30% of the population of the coastal plains.

The significance of the first mass screening of 25,000 citizens cannot be underestimated. First, it confirmed that approximately 30% of the population had an elevated blood pressure and were doing very little about it. Second, it began to change attitudes among medical professionals about high blood pressure treatment and risk factor modification. Third, it provided a precedent of cooperation among federal, state, and local agencies in addressing cardiovascular disease. Finally, it set up an ongoing model of a coordination of community groups and resources to attack a real community health problem.

Many researchers, health organizations, and interested individuals came to Savannah and Atlanta to learn more about this model community program. The Georgia Department of Human Resources adopted the Savannah program as its model for community programs throughout the state. The Milwaukee High Blood Pressure Program also used it as a model. By the mid ’70s, community-based programs like the CCC became the standard approach to addressing the high death and disability rates from uncontrolled high blood pressure and its target organ damage throughout the United States.

While it is somewhat difficult scientifically to link programs like the CCC to the continuing decline in cardiovascular disease rates throughout the state and nation, many Georgians are convinced that these efforts have had a dramatic effect. In 1969, it was beyond the CCC’s originators’ wildest dreams that the stroke death would plummet by 51% over the next 15 years. Although the engima of the radically higher cardiovascular disease rates of the coastal plains remains, much consolation can be taken in the dramatically improved quality of life for the citizens of Georgia in the 1980s.

Stroke Rehabilitation

As late as the mid ’50s, the attitude of both doctors and families of patients with a completed stroke was one of hopelessness. The patients were placed in a nursing home or in a back room, usually at complete bedrest, and they were waited on and pampered as invalids. Under these conditions, the patients usually deteriorated rapidly and complications of decubitus ulcers, muscle spasms, atrophy, and infections were frequent.

Other factors of importance at this time were the lack of physical therapy departments in the hospitals of the state and the unavailability of outpatient physical therapy resources. Even the rehabilitation facilities such as Warm Springs, Georgia, had little activity in the field of stroke rehabilitation. Only three or four hospitals in the state even had departments of physical therapy, and stroke units were unknown.

“It is difficult for most of us to comprehend that the prevention, treatment, and rehabilitation of stroke was not even seriously discussed until the 1950s.”

The resources of the Georgia Heart Association prior to this time had been devoted primarily to the areas of congenital heart disease where successful surgery was rapidly being developed and to rheumatic heart disease where rheumatic fever prophylaxis had begun to dramatically reduce the deaths from rheumatic fever in childhood and the resulting valvular lesions in adults.

In 1959, when Dr. J. Gordon Barrow became President of the Georgia

Heart Association, he changed the focus from these conditions to one of rehabilitation of the stroke victim. Through his membership in the Community Program Committees of the American Heart Association, he knew they were developing a national emphasis on stroke rehabilitation.

By the mid 1960s, attitudes of the public and the medical profession toward the quality of life after a stroke were dramatically changed by single acts of defiance by some stroke patients. Actress Patricia Neal's much publicized stroke recovery became an example to all and brought dignity and hope to many victims of stroke.

About this same time, the American Heart Association, as part of its national emphasis, had decided to develop a film to use to demonstrate graphically the techniques of stroke rehabilitation and the positive results that could be expected. Under the direction of Dr. Bert Testman of the University of California, the film project got underway, and the story of Patricia Neal's dramatic recovery from a stroke was chosen as the topic.

The film, "Stroke-Counterstroke," was produced as an educational tool for both medical professionals and the lay public in teaching stroke rehabilitation techniques. It was premiered in Savannah as a kick-off for the first community-wide blood pressure screening program in 1972.

During this same period, a group of medical professionals met in Savannah to devise a statewide program of stroke rehabilitation. The Georgia Regional Medical Program under the leadership of Dr. Barrow, "the grandfather of stroke rehabilitation in Georgia," sponsored the effort. Candler General Hospital, after visiting Dr. Bertram Howard's model stroke rehabilitation unit at St. Luke's Hospital in New Bedford, Massachusetts, agreed to organize the first comprehensive stroke unit in the state.

Statewide, Dr. Barrow realized that the system of cardiac clinics for indigent cardiac patients presented an excellent resource for developing stroke programs. These clinics were geographically scattered throughout the state and a group of physicians especially interested in cardiovascular diseases were giving their time and energies to these clinics.

Using these clinics and their physicians as resources and with the cooperation of the Georgia Department of Public Health, Heart Disease Control Program, a series of meetings with medical staffs of practically all hospitals with 100 beds or more throughout the state were scheduled. A physician from the Heart Association and a physical therapist from the Health Department would demonstrate to each medical staff the techniques for rehabilitation of the stroke patients and discuss the potential for markedly improved function as well as the prevention of the usual complications of no therapy.

"The changes in attitudes toward rehabilitation have been the most single dramatic change in the past 20 years for the stroke victim, bringing hope to a previously hopeless condition."

In the early '70s, as the stroke rehabilitation team approach began to evolve, many physicians did not accept the notion that paraprofessionals such as social workers and therapists should have a voice in the care of the patient. Slowly, these attitudes began to change.

These new approaches to stroke rehabilitation and the enthusiasm they produced have resulted, in Georgia and throughout the country, in a great change in the attitude toward stroke victims and a marked stimulation in interest in their rehabilitation. As a result, nearly all major hospitals in our state now have organized departments of physical therapy, and stroke rehabilitation has become routine. Outpatient rehabilitation has also become available through health departments, visiting nurse associations throughout the state, and free-standing day care centers like Savannah's Georgia Infirmary, the first such program in the state. A number of stroke units have developed in the larger hospitals for the care and rehabilitation of the more serious strokes.

Most importantly, the attitudes of the physicians and the families of stroke patients have been changed into one of optimism. Many patients are now being shown how to achieve their maximum potential from the complications of stroke, and the costs of care have been markedly reduced.

As we look back over the historical record, the greatest change in the prevention, treatment, and rehabilitation of stroke remains one of attitude. The attitude of the public toward prevention has been changed through risk factor education, especially in the raising of consciousness in blood pressure. Treatment has been changed by both attitude and a rapidly advancing technology. The changes in attitudes toward rehabilitation have been the most single dramatic change in the past 20 years for the stroke victim, bringing hope to a previously hopeless condition.

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ACQUIRED CEREBROVASCULAR DISEASE

HERBERT KARP, M.D.

An overview of the problem and a primer of diagnosis and acute management.

In spite of a recent and as yet an unexplained decline in the incidence[1] and a lessening of the morbidity and mortality of strokes,[2] cerebrovascular disease remains the most frequent neurologic disorder of adults. Most physicians are likely to encounter a significant number of patients with some form of disease of the cerebral vessels. Therefore, it is important that all physicians, regardless of specialty, be able to recognize cerebrovascular disease and have some basic knowledge of the pathophysiology of stroke. This is essential if the physician is to participate effectively in the management of stroke patients.

Clinical Features

The three clinical features that are most helpful in distinguishing stroke from other forms of neurologic illness are:

1. The *temporal profile,* which is characterized by suddenness of onset. This is usually reckoned in minutes or hours. As a general rule, any neurologic illness that is insidious in onset and progresses over days or weeks is not likely to be cerebrovascular disease.
2. The *neurologic deficit* of cerebrovascular disease is *focal*. The nature of the deficit is determined by the distribution of the affected cerebral artery. The reader is referred to Adams and Victor for a discussion of neurovascular anatomy and the syndromes in relationship to cerebral vasculature.[3]
3. With the exception of congenital vascular malformations, diseases of the cerebral vessels are usually a part of a process involving the entire cardiovascular system. Therefore, the *clincial setting,* specifically the presence of other manifestations of vascular disease, is helpful in recognizing the cerebrovascular disease.

Variations of these three clinical characteristics are useful in recognizing the principle types of acquired cerebrovascular disease: cerebral thrombosis, transient neurologic deficits, cerebral embolus, and intracranial hemorrhage.

Cerebral Thrombosis

Temporal Profile

Onset is sudden, frequently during sleep, and may have been preceded by episodes of transient cerebral ischemia (TIA). The deficit usually progresses over several hours or a few days, becomes stable, and is followed by some degree of improvement. Worsening on the second or third day with signs of increasing intracranial pressure is most often due to cerebral edema. This is particularly true of large infarctions.

Dr. Karp is Professor of Neurology, Emory University School of Medicine, and Director of Medical Services, Wesley Woods Center, 1817 Clifton Rd., Atlanta, GA 30329. Send reprint requests to Stroke Subcommittee, American Heart Association, Georgia Affiliate, 2581 Piedmont Rd., P.O. Box 13589, Atlanta, GA 30324.

Neurologic Deficit

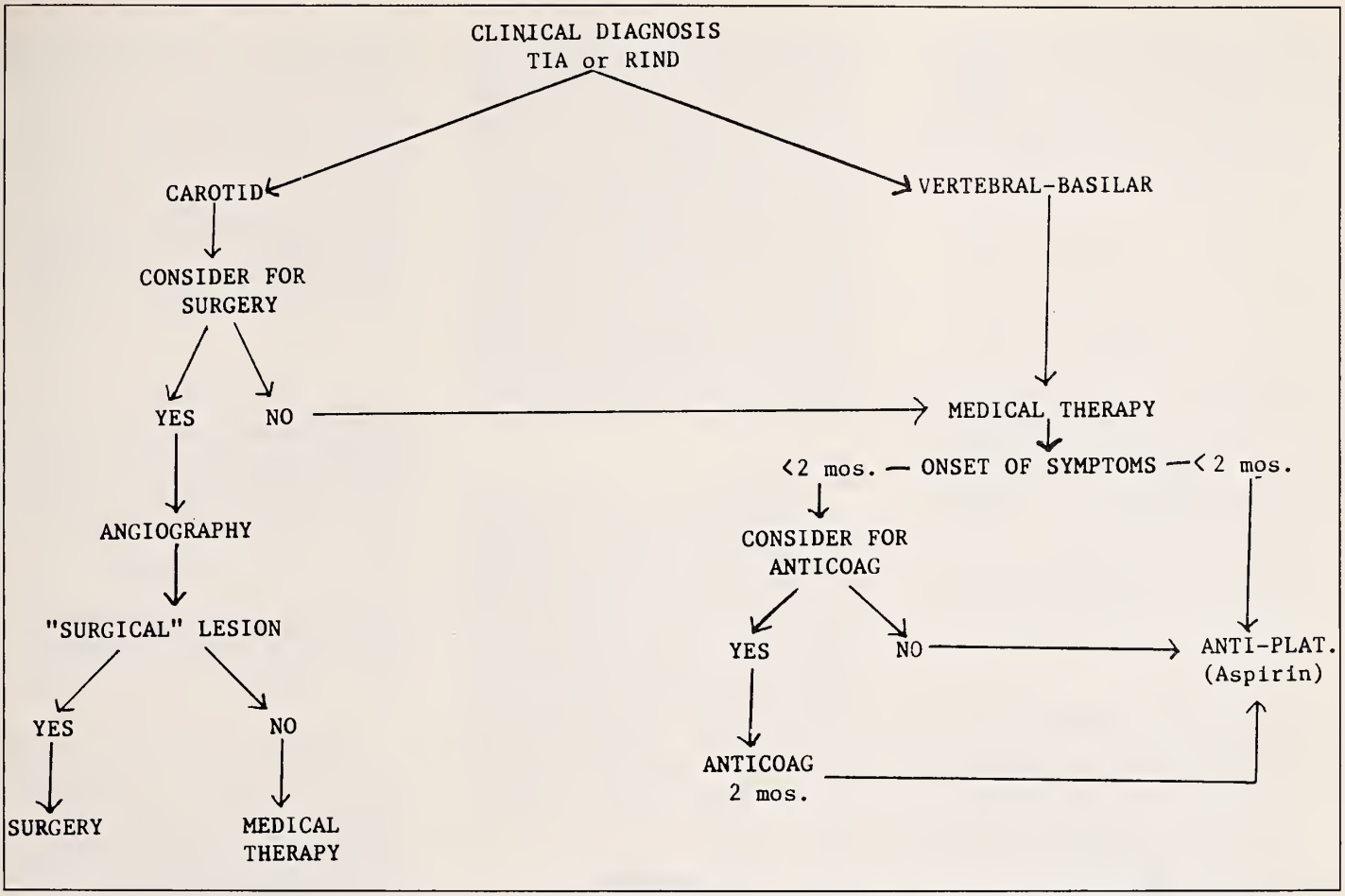
The nature of the deficit may be variable depending on the vessel which is occluded and ischemia modifying factors such as collateral circulation and cardiorespiratory function. Generally, however, the deficit corresponds closely to the territory supplied by a given artery.

Clinical Setting

Cerebral thrombosis is most often a result of atherosclerosis. Hence, other evidence of atherosclerosis, such as coronary or peripheral vascular disease, is usually present.

Treatment

The mainstay of the management of cerebral thrombosis with infarction is careful support of cardiac and respiratory function in order to maintain well oxygenated cerebral circulation. Anticoagulants and antiplatelet agents have no role in the acute phase. In fact, anticoagulants are contraindicated. Cerebral edema when present may be treated with anti-inflammatory agents or osmotic diuretics. Pro-



A Schema for the Clinical Diagnosis and Management of Transient Cerebral Ischemia (TIA) and Reversible Ischemic Neurologic Deficit (RIND).

phylactic use of adrenocortical steroids does not prevent cerebral edema. Cerebral vasodilator drugs or thrombolytic agents have not proved to be beneficial.

Carotid endarterectomy in the acute phase of a cerebral thrombosis is still of questionable value[4] and is generally considered to be hazardous.

Cerebellar infarctions with edema may be an indication for surgical decompression of the brain stem.

Transient Neurologic Deficits

A transient ischemic attack (TIA) is defined as a neurologic deficit of vascular origin that clears within 24 hours without significant residue. A reversible ischemic neurologic deficit (RIND) lasts beyond 24 hours but also clears without significant residue. Though their effects are transient, both TIAs and RINDs have the same clinical characteristics as cerebral thrombosis.

Treatment

About 65% of patients with cerebral thrombosis experience TIAs or RINDs prior to the stroke that result in a persistent neurologic deficit. Conversely, 30 to 35 percent of patients with transient deficits never develop a persistent deficit. Since there is no way to predict which patient with a transient deficit will have a persistent one, all patients should be considered at risk and managed accordingly. A schema for such an approach is presented in Figure 1. In summary, once the diagnosis of TIA or RIND is firmly established, the physician must determine if the symptoms are in the territory of the carotid or the vertebral-basilar artery. If they are in the vertebral-basilar artery, the patient should receive medical therapy. If the symptoms are in the carotid circulation, surgical management by endarterectomy should be considered, provided safe and effective arteriography and thromboembolectomy are available, and the patient can withstand the procedures.

Though carotid endarterectomy is very frequently performed, there is not yet universal acceptance of its benefits.[5] It is generally agreed, however, that in carefully selected cases, skillfully performed surgery reduces the number of TIAs and probably lessens the chances for the patient having a persistent deficit.[6]

The results of a recent extensive, controlled study of the internal carotid/external carotid bypass indicate that this procedure has no benefits over antiplatelet drugs in the treatment of occlusive cerebrovascular disease.[7]

Aspirin, through its inhibition of platelet aggregation, has been reported as being effective in the long-term management of patients with TIAs. This benefit was most definite when the incidence of myocardial

events was included in the analysis. The beneficial effect was limited to non-hypertensive males. Sulfinpyrazone alone or in combination with aspirin did not improve the effect. The study had insufficient patients in the acute phase of TIAs or RINDs to warrant definite conclusions regarding aspirin in the first 2 months.[8] Results of the study have been challenged by others, primarily because of the small sample size.[9, 10] These inconclusive results notwithstanding, most clinicians, including the author, use aspirin in patients with threatened cerebral thrombosis. The beneficial effect with regard to myocardial infarction is less controversial and justifies the use of antiplatelet agents in patients with cerebral atherosclerosis.

"Anticoagulants and antiplatelet agents have no role in the acute phase of cerebral thrombosis with infarction."

The reader should be reminded that the most frequent cause of death in patients with cerebral atherosclerosis is myocardial infarction. Therefore, symptoms of cerebral atherosclerosis should be an indication for a thorough evaluation of the patient for possible coronary artery disease.

Cerebral Embolus

Temporal Profile

The onset is the most sudden of all forms of cerebrovascular disease; there are less variations in the temporal profile than may be encountered in cerebral thrombosis. Cerebral embolus is rarely if ever preceded by TIAs. The course following the onset is variable and does not differ significantly from that of cerebral thrombosis.

Neurologic Deficit

The neurologic deficit of cerebral embolus is a function of the size of the embolus in relationship to the diameter of the cerebral vessel it enters. Since most emboli are small, they are likely to reach the terminal branches of vessels that supply the cortex and other distal structures. As a consequence, the deficit may be quite restricted (e.g., involving the finger but sparing the arm and face; or selective loss of cortical function, such as aphasia or an isolated homonymous hemianopia). Seizures are more likely to be seen earlier in cerebral embolus than in other forms of cerebrovascular disease.

Clinical Setting

The heart is the most frequent source of cerebral emboli. It follows that, with few exceptions, cerebral embolization can be considered as a manifestation of heart disease. The most frequent underlying cardiac conditions are cardiac arhythmias, particularly atrial fibrillation, valvular disease, or a mural thrombus following a myocardial infarction. Prosthetic cardiac valves are a frequent source of emboli. Consequently, the occurrence of a neurologic deficit that has the characteristics of a cerebral embolus should lead to a thorough search for a cardiac source.

Treatment

In planning the medical management of the acute phase of a cerebral embolism, the physician must be aware of two possible types of pathology:

1. For several reasons, the infarction associated with the cerebral embolus is likely to be hemorrhagic.
2. The cerebral embolis associated with bacterial endocarditis can result in a mycotic aneurysm, which in essence is an abscess in the wall of the embolized vessel. This is particularly true of streptoccocus viridans infections. These conditions both carry a risk of hemorrhage and significantly affect the decision to use anticoagulants. This decision is made even more difficult by the fact that most repeat emboli occur within 10 to 14 days after the first one. Therefore, there is some degree of urgency to begin anticoagulant therapy.

The CT scan and lumbar puncture can detect hemorrhage but may be less helpful in the first few days following the infarction. As a general guide, if these procedures are negative after 3 or 4 days, then anticoagulants can be safely begun.[11] Anticoagulant therapy is contraindicated, however, in cerebral embolism associated with bacterial endocarditis.

"In planning the medical management of the acute phase of a cerebral embolism, the physician must be aware of possible types of pathology."

The ultimate goal of treatment is to prevent further cerebral emboli. This is best accomplished by correcting the underlying cardiac source by such measures as cardioversion, surgical treatment of valvular lesions, or the amputation of artrial appendages or ventricular aneurysms. Long-term anticoagulant therapy is of proven benefit in preventing further embolization.

Intracranial Hemorrhage

For this overview, the discussion will be limited to hypertensive intracerebral hemorrhages.

Temporal Profile

The onset is sudden but not to the degree seen in cerebral embolism. Headache, usually severe, is often present at the onset of the hemorrhage. The deficit evolves over several hours, frequently resulting in acute intracranial hypertension and coma.

Neurologic Deficit

Hypertensive hemorrhages occur in the distribution of short, penetrating, end arteries that originate from the main trunk of major cerebral arteries. They are seen, in decreasing frequency, in the putamen, thalamus,

pons, and cerebellum. The resultant neurologic deficit is a function of the area of the hemorrhage and does not conform as closely to the distribution to the given cerebral vessel as is seen in occlusive strokes. The intraparenchymal hemorrhage destroys, dissects, and compresses adjacent and distant brain tissue. In many instances, this results in impaired consciousness early in the course of the ictus. The immediate prognosis for life in massive hemorrhages is grave. The reader is referred to Mohr, Fisher, and Adams for a detailed description of the clinical forms of intracerebral hemorrhage.[12]

Clinical Setting

By definition, this form of spontaneous intracerebral hemorrhage is always seen in the company of an elevated blood pressure or some evidence of significant hypertension.

Treatment

The general plan of management of occlusive strokes also applies to hypertensive intracerebral hemorrhage. There is no evidence that inducing real or relative hypotension limits the hemorrhage or slows its progression nor does it have any favorable effect on the hemorrhage. Lowering of the blood pressure is likely to be counterproductive.

"There is no evidence that inducing real or relative hypotension limits the hemmorrhage or slows its progression nor does it have any favorable effect on the hemorrhage."

There are reports of the acute evacuation of massive putaminal, thalamic, or even pontine hemorrhage as being life-saving in a rapidly deteriorating patient. Other reports however are less positive. Prior to the advent of CT scans, it was generally felt that a cerebellar hemorrhage was an absolute indication for surgical evacuation. With the CT scan as a means of following the progression of the hemorrhage, many patients with such lesions survive the acute episode with minimal residual deficit without surgical evacuation. The fact remains, however, that in instances where there is steady progression with evidence of brain stem compression, the surgical evacuation of the cerebellar hematoma can be lifesaving.

"In the final analysis, the most effective opportunity for intervention in cerebrovascular disease is prevention — before there is irreparable destruction of brain tissue."

Summary

This overview of cerebrovascular disease is presented in the context of significant advances in our understanding of stroke which have occurred over the past few decades. One of the most significant of these advances has been the appreciation of factors that increase the risk of people having cerebrovascular disease. Hypertension, through its involvement of small arteries as well as its effect on accelerating atherosclerosis in larger arteries, is by far the most important risk factor in ischemic as well as the hemorrhagic stroke. Diabetes, through its effect on large and small cerebral arteries, also is a significant risk factor. Other determinants of a patient's liability to stroke include smoking, hyperlipidemia, and obesity. Of these, the effect of smoking is the best documented.

All of the risk factors share one common feature — namely, that they can be favorably modified by changes in lifestyle and the judicious use of medication. In the final analysis, the most effective opportunity for intervention in cerebrovascular disease is prevention — before there is irreparable destruction of brain tissue. This should be the major objective of all physicians concerned with the management of patients with cerebrovascular disease.

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STROKE REHABILITATION

BRIGITTA REES, M.D., JOHN BANJA, PH.D., ASHOK BHOOMKAR, M.D., SHENG TCHOU, M.D.

The onset of a stroke can be a grim and even devastating reminder of how tenuous our claim to being able bodied actually is. Consequently, many stroke victims will enter rehabilitation so as to regain their highest possible level of function and reclaim a more worthwhile level of existence.

Introduction

THOSE OF US who are "able bodied" may easily take our physical prowess for granted. We lose sight of how much the quality of our lives is dependent on our functional ability, and we forget that the ease with which we interact with our environment may be only temporary. The onset of a stroke, however, can be a grim and even devastating reminder of how tenuous our claim to being able bodied actually is. Consequently, many stroke victims will enter rehabilitation so as to regain their highest possible level of function and reclaim a more worthwhile level of existence.

Stroke patients, especially those who have suffered a serious cerebrovascular accident (CVA), may find the rehabilitation process arduous not only on themselves but also on their families and on the treatment staff. Moreover, because strokes tend to affect older (and often feeble) persons, the process of functional restoration may be affected by a patient's premorbid medical condition, decreased endurance, or lack of stamina. Still, competently performed rehabilitation on a reasonably motivated patient often results in an exceptionally worthwhile outcome.

Historical and Economic Perspectives

Stroke rehabilitation seems relatively recent, although Hippocrates accurately described "apoplexy."[8] His prognosis, which underwent little change in the centuries following, was that moderate strokes were difficult to treat while severe attacks were virtually incurable. With the advent of electricity in the mid-18th century, however, a number of studies appeared proclaiming the benefit of electric shocks in paralysis, particularly hemiplegia. Benjamin Franklin was said to have been begged by hemiplegics in Philadelphia to be treated with a static electricity device sent from England.[8]

The late 18th and 19th century saw aggressive exercise recommended for the stroke victim, but by the early 20th century, aggressive treatment encouraging exercise gave way to an emphasis on spontaneous recovery, i.e., bedrest.

Despite the theories of Kouindjy, Brissaud, and Bucholz — all of whom stressed the importance of early exercise and therapeutic intervention following a stroke — rehabilitation in general and stroke rehabilitation in particular did not become truly aggressive until World War II. Within the next 20 years, facilitation techniques emphasizing body positioning and therapeutic exercises (especially using pathologic reflexes) were developed, prognostic factors were

Dr. Rees is Director of the Rehab. Research and Training Center, Chief of Clinical Physiatry, and Assistant Professor of Rehab. Medicine; Dr. Banja is Director of Continuing Education and Assistant Professor, Dept. of Rehab. Medicine; Dr. Bhoomkar is Associate Chief of Service and Assistant Professor in Rehab. Medicine; and Dr. Tchou is attending physician, Emory University Hospital, and Assistant Professor in Rehab. Medicine, Emory University School of Medicine. Send reprint requests to Stroke Subcommittee, American Heart Association, Georgia Affiliate, 2581 Piedmont Rd., P.O. Box 13589, Atlanta, GA 30324.





Paralysis and muscle weakness resulting in mobility deficits are the most outstanding characteristics of a complete stroke. With the help of an occupational therapist, this patient works on upper extremity ranging, coordination, and cognitive retraining.

"Support for research in stroke prevention and rehabilitation, familial intervention, and psychologic services and vocational rehabilitation if appropriate should be encouraged if the goal of restoring a meaningful life to patients is to be attained."

identified, and patient outcomes with and without rehabilitation were studied.[5, 7, 11]

During the last 10 years, much attention has been focused on identifying which stroke patients can benefit from a rehabilitation program. Obviously, the size of the lesion, its location, the premorbid state of the brain, and the patient's age and overall physical status are important factors in stroke outcome.

The last ten years have also witnessed a number of cost benefit analyses of stroke rehabilitation. For example, stroke rehabilitation in 1980 cost $6,000 to $11,000 per patient per year, depending on the severity of the lesion, while nursing home care for the same patient per year was placed at $18,000 to $36,000.[4] Furthermore, statistics from major rehabilitation centers in the United States showed that 80 to 90 percent of rehabilitated stroke victims returned to some form of home living,[3] while 54 percent of patients working at the time of their strokes reentered the work force on a full-time or part-time basis (or as full-time or part-time homemakers).[2] About 75 percent of stroke victims regain their independence in daily living functioning, and 70 percent eventually walk.[12] These figures, along with the fact that 50 percent of stroke patients live 7½ years or longer following their CVAs, present compelling arguments for the benefits rehabilitation might offer stroke victims.

The Rehabilitation Process

Acute Stroke Rehabilitation

How soon after the onset of stroke should rehabilitation begin? The contemporary opinion is that this stage has been reached when there has been no further evidence of progression of neurologic deficits for 48 hours.[6]

Many complications from stroke that were formerly considered part of the natural history of completed stroke are preventable and avoidable. Intellectual regression due to sensory deprivation,[9] physical deterioration, joint contractures, bladder and bowel incontinence, and skin problems are common sequelae of stroke and can retard the patient's recovery. Therefore, while the patient may still be at bedrest, the treatment staff will begin a reality orientation program early to minimize the patient's intellectual regression and promote a sense of progress and improvement to counteract depression. Early mobilization and minimizing the bedridden stage help to avoid the counterproductive effects of physical deconditioning. The treatment staff will avoid contractures by employing proper bed positioning, passive and active assistive range of motion exercises, and splinting.

Neurologic bladder dysfunction is managed by catheter drainage to avoid overdistention if the involved extremities are quite flaccid.[6, 9] A bladder training program would begin as peripheral reflexes return. Intermittent catheterization, pharmacologic interventions as well as urodynamic studies may be indicated.[6, 9] A daily or every-other-day bowel program can be maintained with dietary changes, medications, suppostitories, or digital stimulation.

Decubitus ulcer may occur, particularly if the patient has some sensory deficits on the involved side or has been under the influence of heavy sedation or analgesia. Pressure sores are prevented by bed positioning, a timed pressure relief program and skin care.

The Treatment Team

Once the patient is medically stabilized, alert, follows visual or verbal commands and has adequate mental capacity, he or she is ready to be transferred either to a rehabilitation unit or a free-standing rehabilitation facility. The comprehensive or team approach is unique to rehabilitation and ideally utilizes a milieu therapeutic approach.

The rehabilitation team consists of a team leader who is usually a physiatrist, a rehabilitation nurse, physical therapist, occupational therapist, speech pathologist, nutritionist, activity therapist, psychologist, social worker, and a vocational counselor when appropriate. The team works together, communicates and coordi-

nates its efforts on a daily basis, and discusses the patient's status, recent achievements, and problems through weekly team rounds. The meeting may result in modifying the general treatment plan, revising particular goals, or developing strategies for new and unexpected problems.

Evaluation and Concomitant Findings

When the patient enters the rehabilitation setting, a careful evaluation is begun that may last 1 or 2 days. A careful evaluation of the patient's memory, ability to follow two-step commands, orientation in time and place, and information processing constitutes the initial phase in determining an individual's rehabilitation potential. Within the first day or two, functional assessment of bed mobility, sitting balance, transfers, wheelchair mobility, standing, and ambulation should occur. Also, an assessment should be made of the patient's degree of dependence on others in performing such tasks as hygiene, grooming, and dressing. Given the patient's current functional status, degree of hemiplegic involvement, and overall medical status, a treatment plan for each discipline is outlined with individual goals set. An elaborate assessment of the patient's final disposition or home setting, usually performed by a social worker, should be obtained early because the treatment team needs to know the kind of environment for which to train and prepare the patient.

Many stroke victims exhibit a variety of concomitant medical problems that may significantly interfere with their tolerance of an intensive rehabilitation program. A past or current history of cardiac problems, pulmonary involvement, and chronic disease with anemia are common. Moreover, syndromes co-existing with neurologic involvement are not unusual. For example, both diabetics and patients with chronic renal failure tend to have peripheral neuropathy that could aggravate hemiplegic problems, while many patients with a lacunar state may have pre-existing Parkinsonian rigidity. In the elderly female, severe osteoporosis can be exacerbated by inactivity and bedrest. Careful attention should be given to a premorbid history of arthritis of any kind because overworking the non-hemiplegic side can cause an arthritic flare-up whereas paralysis of the hemiplegic joints leaves them unprotected and subject to trauma.

Depending on the location of the CVA, involuntary motion disorders may occur, with coordination at times severely affected. Also, hemiplegics with right-brain CVAs tend to exhibit sensory integrational dysfunction sometimes resulting in denial of body parts, inattention or unawareness of a hemispace. Sense of horizontality and verticality may be severely disturbed. For these patients, the recommended treatment is to avoid visual cues in favor of verbal cues. In contrast, hemiplegics with left-brain CVAs resulting in language problems may do poorly with verbal input but respond well to visual and contextual cues.

A Treatment Day

Once the patient is integrated into the rehabilitation setting, every effort is made to simulate a normal day's activities. A typical day for the stroke patient begins with either the nurse or occupational therapist assisting the patient from bed and helping with daily activities. As much as possible and with whatever assistance they need, patients perform routine activities such as toileting, grooming, hygiene, and dressing. Wearing comfortable exercise or street clothing is encouraged very early.

Following breakfast, patients have scheduled physical therapy and occupational therapy each lasting 30 minutes. In physical therapy, the patient works on range of motion, muscle facilitation, strengthening, mat mobility, sitting balance, transfers, wheelchair mobility, and early standing. In occupational therapy, the patient works on upper extremity ranging, coordination, cognitive retraining as well as activities of daily living.

A communal lunch is usually eaten in a centrally located dining room.

“Many stroke victims exhibit a variety of concomitant medical problems that may significantly interfere with their tolerance of an intensive rehabilitation program.”

“Rehabilitation professionals take pride in observing that rehabilitation treatment does not respond to a discrete clinical entity but rather to the whole person and his or her family.”

Patients at risk of aspirating are supervised by professionals during eating.

Afternoon activities consist of another 30-minute session in physical therapy and occupational therapy. Frequently, rest periods are interspersed throughout the day. If the patient's communicative abilities are impaired, he or she will receive half an hour to an hour of speech therapy as needed.

The patient who has developed endurance and exercise tolerance will enjoy evening recreational activities either by himself, in groups, or with his family. Close to discharge, a ''therapeutic weekend pass'' is strongly encouraged wherein patients leave the rehabilitation facility to stay overnight at their homes.

Family information and participation are encouraged early and throughout the rehabilitation process, even though tight therapeutic scheduling usually requires strictly enforced visiting hours. Formal family teaching sessions and conferences are arranged as needed. The average length of stay for stroke victims in a rehabilitation setting is approximately 35 to 40 days.

Special problems

Mobility management: Paralysis and muscle weakness resulting in mobility deficits are the most outstanding characteristics of a complete stroke.[6] In the total process of intensive rehabilitation therapy, bed mobility, sitting balance, transfers, wheelchair management, and ambulation training occur in tandem with muscle facilitation, strengthening, and reconditioning.[9]

When the patient starts to have good sitting balance and adequate muscle strength, a proper wheelchair should be used to facilitate mobility. When a patient starts to stand and ambulate, a professionally fitted orthosis (usually a plastic ankle-foot orthosis) will minimize ambulatory dysfunction and decrease energy expenditure during gait.

Upper extremity problems: Loss of motor function often results in shoulder subluxation. A painful shoulder always develops after a stroke.[6] The scope of pathology may vary from a mildly restricted, mildly painful shoulder to severe adhesive capsulitis. Shoulder-hand syndrome is also one of the complications.

Support and proper positioning of the hemiplegic upper extremity, muscle facilitation, prevention of contractures, and early mobilization constitute the focus of treatment. With the use of hemi-sling, lap board, or a pillow to support the flaccid upper extremity, heat modalities such as hot pads and ultrasound may be used along with passive range of motion exercises. In many instances, systemic steroids or stellate ganglion blocks may relieve severe shoulder-hand syndrome.

Spasticity: During the recovery phase of stroke, the affected limbs progress from a state of flaccidity to increased spasticity (along with development of flexor or extensor synergies) and finally to return of voluntary motor function.

“Many complications from stroke that were formerly considered part of the natural history of completed stroke are preventable and avoidable.”

This general pattern of recovery may cease to progress at any phase. Hence, spasticity cannot always be considered to herald return of voluntary motor function. Some spasticity may be quite useful to the patient, particularly for standing and walking, but spasticity often leads to pain, discomfort, below level performance, annoying tightness, and decreased function and cosmesis. Many persons resent the appearance of a spastically contracted hemiplegic upper extremity, while plantar flexor spasticity in the lower extremity can significantly interfere with walking.

The use of both heat and cold has been noted in some stroke patients to have some temporary effect on re-

ducing the amount of spasticity.[6] Probably the most well publicized approach to spasticity is through drugs. Diazepam, baclofen and dantrolene have been advocated as effective antispasticity treatments. Most of the drugs used for spasticity also have some effect on central nervous system functioning, particularly alertness. Dantrolene can cause liver toxicity. However, dantrolene can be beneficial in extremely low dosages (usually given at night) accompanied by careful monitoring of the liver profile. Physical therapy such as stretching and dynamic exercises will also provide relief. In the past 15 years, phenol motor point blocks have been used for spasticity in an isolated involved muscle. This procedure is usually well accepted by patients and in carefully selected populations can be quite effective.

Speech and language problems: Many patients exhibit considerable degrees of speech and language deficits, especially persons with aphasia who have virtually no understanding of the spoken word and no meaningful verbal expression. Language intervention strategies were questioned for a long time by the medical profession, but recent evidence shows that speech and language therapy produces significantly favorable results, although it can require a long period of time to be effective. Treatment over a year or more is not unusual.

Emotional reactions: In the days and weeks following a stroke, the impact of what has happened and the experience of functional loss may easily trigger anxiety and depression.[10] The patient may confess to a loss of self-worth and self-esteem and may manifest all the symptoms of a major depression. Rehabilitation professionals recognize that grieving is a necessary and normal reaction to a major loss in life and that patients may require time, often with the help of a psychologist, to refocus their energies for dealing with the future. Self-worth and self-esteem need to be re-established with the general recommendation that antidepressant medication be introduced only when depressive manifestations become excessive.

Conclusion

Rehabilitation professionals take pride in observing that rehabilitation treatment does not respond to a discrete clinical entity but rather to the whole person and his or her family. Perhaps, though, such a treatment philosophy might be encouraged as a future paradigm for many kinds of medical interventions. It is not farfetched to imagine that stroke and other syndromes associated with aging might some day be thought of as social diseases of a large elderly population. Thus, it is important that physicians appreciate the life changes stroke brings on, the nature of stroke rehabilitation, and the resources that can bring about meaningful outcomes.

"Clinical strategies that will lead to improved outcomes for stroke patients must continue to be developed despite shrinking budgets."

Especially important is recognizing that stroke rehabilitation, like all of medicine, is facing a great challenge in that if current reimbursement trends continue, the rehabilitation professional will be forced to do more with fewer resources. Therefore, clinical strategies must continue to be developed that will lead to improved outcomes despite shrinking budgets. Support for research in stroke prevention and rehabilitation, familial intervention, and psychologic services and vocational rehabilitation if appropriate should be encouraged if the goal of restoring a meaningful life to patients and, someday, perhaps to the currently able-bodied among us, is to be attained.

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HEART ATTACK DOESN'T WAIT

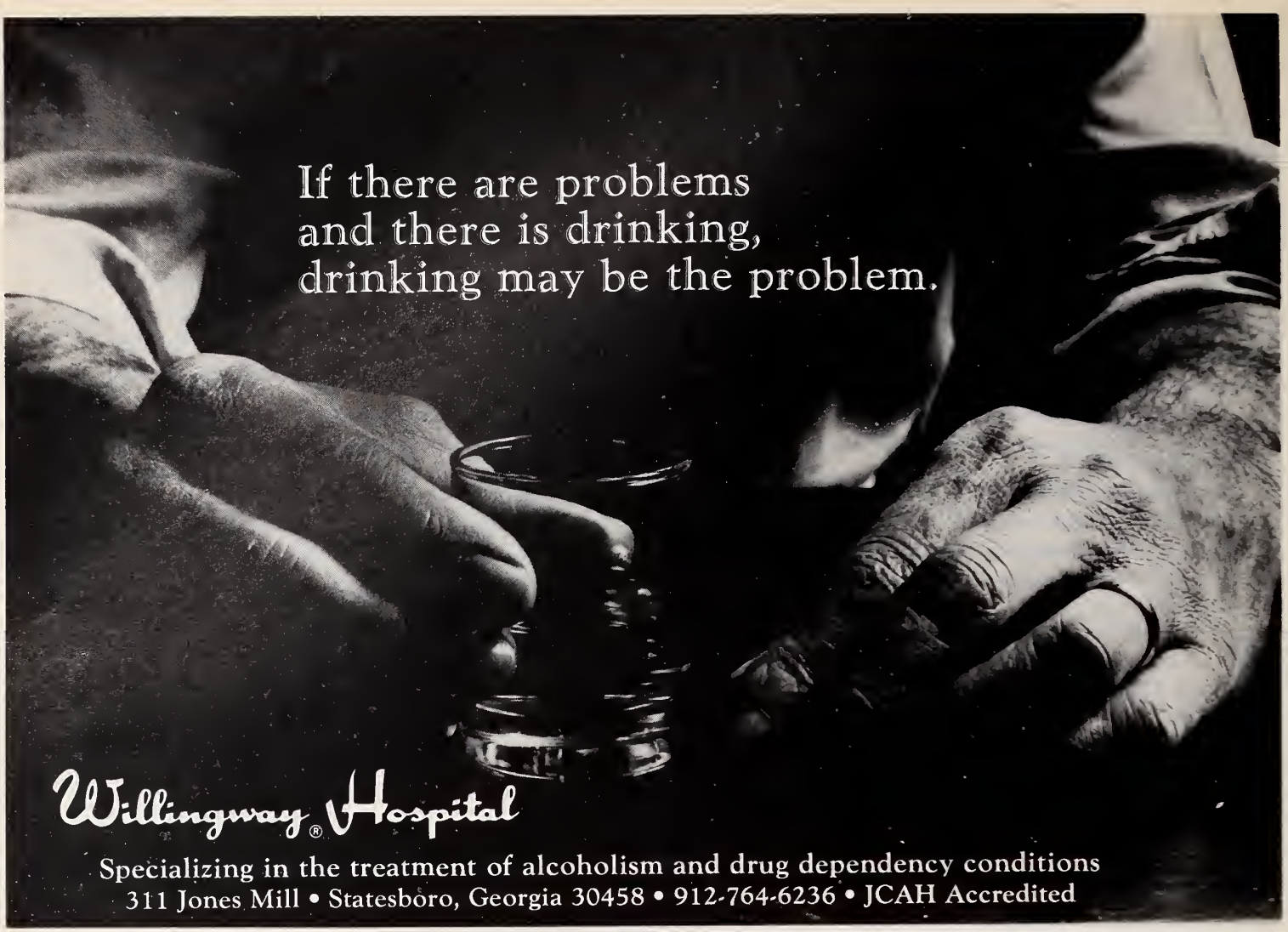
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COUNSELING THE STROKE PATIENT AND FAMILY

DOROTHY D. COHEN, M.ED., CECIL HARBIN, ED.D., LISA COLLIS, M.S.W., JANE S. GREENBERGER

The psychologic impact of stroke can be devastating to families as well as to patients. Without a doubt, the entire family "has a stroke." Emotional distress, especially fear, feelings of loss, frustration, anger, and guilt are common. Counseling to assist patient and family to adjust to changes in lifestyle should begin early in the rehabilitation process.

A MAJOR FINDING of the final Framingham study on long-term disability is that patients recovering from stroke need — more than anything else — help in getting back into community life and coping with their real problems of adjusting to the environment.[1] Recovery and rehabilitation following stroke optimally involves a comprehensive, coordinated effort by a multidisciplinary team. Physical therapy, occupational therapy, and speech therapy are usually begun as soon as possible to assist the patient to return to his/her maximum potential. Counseling to assist patient and family to adjust to changes in lifestyle should also begin early in the rehabilitation process.

The Family Has a Stroke

The psychologic impact of stroke can be devastating to families as well as to patients. Without a doubt, the entire family "has a stroke." Emotional distress, especially fear, feelings of loss, frustration, anger, and guilt are common following stroke. There is fear of death, then fear of survival with disability and/or disfigurement. There is the question of whether there is "life after stroke" and, if so, what will it be like? Will the patient be able to return home and care for his own needs or will loss of ability to care for oneself become so great that nursing home placement is necessary? There is the fear of the unknown, the "what ifs." This is further increased by ignorance about stroke and what can be accomplished through stroke rehabilitation.

Ms. Cohen and Dr. Harbin are in private practice; Ms. Collis is with the Department of Social Services, Emory University Hospital, and Mrs. Greenberger is the wife of a stroke patient. Send reprint requests to Stroke Subcommittee, American Heart Assoc., Georgia Affiliate, 2581 Piedmont Ave., P.O. Box 13589, Atlanta, GA 30324.

Feelings of loss are experienced by the patient and the family from the outset. In the hospital, everyone is expected to comply and not question anything. The patient and his family are reduced to an infantile role, though denied permission to exhibit similar behaviors (e.g., anger and acting out are not acceptable). One experiences loss of ability to care for one's most personal needs; there is frustration over inability to perform tasks previously taken for granted, like feeding oneself or going to the bathroom unaided. There is loss of status, loss of privacy, almost loss of person. One enters a hospital, receives a wrist bracelet with a number and a diagnosis on a chart. Frequently, discussions are held about the patient in his or her presence as if he or she were not present, were a non-feeling, nonperson. Family members, uncomfortable with the situation or insen-

sitive to the patient's feelings, may not include the patient in conversation.

The patient's feelings of helpnessness and frustration at being so dependent on others may result in hostility toward staff and family. Fear of being a burden on others may create guilt in the patient. Family members may feel resentment and guilt over anticipated changes in their own lifestyles, responsibilities, etc.

Depression is almost universal. In some cases, it is organically based, related to the location of the lesion. Studies show an increased occurrence of depression in those patients where the lesion is in the left anterior portion of the brain. Situational depression accompanies any catastrophic illness. Regardless of which factor is predominant, brief psychotherapy and, if indicated, antidepressant medication can be very effective.

"The patient's feelings of helplessness and frustration at being so dependent on others may result in hostility toward staff and family."

Family members also experience a myriad of feelings, all of which impact on their behavior and influence their reactions to the patient and hospital staff. The family may fear anticipated entrapment and isolation. Guilt over past behavior frequently comes to the fore at this time. The family may experience a feeling of helplessness, compounded by confusion over not understanding what a stroke is, why the patient behaves as he or she does, and what is expected of them. Families, like patients, may use denial.

Disappointment may be present if recovery is not as rapid or complete as expected. With the patient and family, encouragement and support, including positive feedback about the smallest gains, is important. The counselor emphasizes that recovery from stroke is a dynamic process.

Once survival appears assured, the minds of patients and families naturally turn to quality of life issues. Questions and concerns about sexual activities are important in themselves, but even more so as the paradigms of the unspeakable. Some changes may result from extensive neurologic damage. However, side effects of medication, performance anxiety, and fear of the consequences of the physical effort associated with sexual activity are all treatable conditions within the purview of experienced counselors. The same support, reassurance, encouragement, and education provided to "normal" patients with sexual dysfunction will be most helpful in treating any sexual problem in stroke patients and their families. The counselor should emphasize that intimacy and satisfaction are achieved through the quality of the relationship; that sexual functioning is more than intercourse.

"Family members also experience a myriad of feelings, all of which impact on their behavior and influence their reactions to the patient and hospital staff."

Role changes (e.g., breadwinner to retiree, homemaker to receiving assistance with personal care or walking) are painful. Family members may have to assume more responsibilities.

The Framingham Study reported that stroke programs should be geared toward helping patients with their attitudes, getting them back into the community, and minimizing factors that contribute to perpetuating functional disabilities.[2] This should begin during the acute stage with the assessment of family relationships, strengths of the support system, and extent of knowledge about stroke.

Learning what to expect and how to adapt to it in a dangerous situation helps to reduce fear. Patients are more apt to follow physicians' directions when they *understand* why they should do so. Following this assessment, counseling with the family and patient, when medically appropriate, should begin. The use of films and booklets provides information and serves as an opportunity to discuss feelings and concerns. Family counseling assists to defuse the situation, enlisting the family as a cooperative, involved part of the patient's treatment.

With hope, knowledge, and understanding, patients are more willing to work in therapy. Family members are more cooperative in allowing the individual to learn to regain as much independence as possible. This helps to relieve the person of the role of the "sick patient" and decreases the responsibilities on the caregiver. This involvement assists in increasing the family's comfort level and thereby reduces anxiety about the person's discharge to their home. Information about community resources is crucial to assist everyone with the realization that they are neither unique nor alone, and that additional assistance is available as needed. As the patient's condition stabilizes, adjustment begins — adjustment to chronicity, disability, and changes in lifestyle. The success of this adjustment lies in the manner in which patient and family cope with these changes.

A Stroke is the Death of Part of the Self

It is normal for patients to go through stages of adaptation in reacting to the loss of function resulting from a stroke. The stages of adaptation are similar to the reactions to the loss of a loved one or of terminally-ill patients to the awareness of their approaching death.[3]

Denial is usually the first stage of adaptation. Patients may deny that there is anything wrong with them or that the disability is anything more than a passing inconvenience.

The second stage of adaptation is anger. When patients realize that their

optimistic attitude toward their condition was unrealistic, they commonly react with anger. They may project anger onto others, a spouse, children, doctors, nurses, other professional people, or even God.

The third stage of adaptation is depression. Anger may be turned inward. Patients may feel that the stroke was punishment. They may withdraw. Feelings of helplessness and inadequacy may be intensified. This is the most difficult stage.

"Questions and concerns about sexual activities are important in themselves, but even more so as the paradigm of the unspeakable."

The fourth stage is acceptance or adjustment. In this stage, stroke patients realize that their impairment presents a problem with which they have to deal. If patients have been helped to work through the other stages of adaptation, they may be neither depressed nor angry about their "fate." Patients may decide to adapt to the disability as well as they possibly can or they may become resigned to their condition and do nothing.

The counselor must be responsive to what stroke patients and their families are experiencing and help them to get through the various stages of adaptation. An essential part of the counseling process is the development of a relationship of understanding and mutual respect so that the patient and family feel free to share their private fears, frustrations, and anger. Bringing feelings out into the open is a step in identifying the problems that need attention. Sharing problems with another person puts them in perspective and gets rid of some of the tension that makes it more difficult to cope with everyday demands.

Patients have to depend on others for help. Stroke patients require more assistance than many other patients, and consequently they need more encouragement in their efforts to achieve independence. They should be treated as persons of dignity and personal worth. They should not be treated in a childlike or condescending manner. Counselors and others should work with patients instead of doing things for them, so that the patients are active participants, not just passive recipients.

Going Home

Planning for outpatient follow up must begin before discharge. The physician, the patient, and the family should begin to consider rehabilitation alternatives early in the hospital stay. The patient and family must be included in the decision-making process, as they must live with the consequences.

When the patient goes home, everyone must understand that treatment is not over; only the acute phase is. It is important to emphasize that care will continue to be under the supervision of the physician, to identify support personnel who will be providing therapy, and to discuss therapy goals. To facilitate transition from hospital to home, it is advisable to invite home health agency personnel to discharge planning conferences. The family must be prepared to meet the essential needs of the patient. During the acute phase of treatment, the social worker or counselor will have discussed with the family their responsibilities, helped to identify the primary caretaker, and shared with the physician the assessment of the home situation and patient resources.

The needs of the caretaker must be considered. He/she is often of the same generation as the patient, the patient's spouse, and may also have medical problems. The caretaker may feel overwhelmed with responsibility. Skills learned in the hospital may be difficult to transfer to the home environment. It is important to mobilize support systems for the caretaker, including the prescription of time away from the patient. Prepare the caretaker for possible regression of the patient after discharge, and at the same time encourage the patient to be as self-reliant as possible. If the patient is being transferred to a rehabilitation facility, the patient and family may be euphoric.

Realistic rehabilitation goals should be discussed several times, as the patient and family may not hear them the first time. Encourage the family to visit the rehabilitation center, talk with the staff, tour the facility, and meet the physician who will be responsible for the care of the patient. Many facilities will send an assessment team to the hospital to evaluate the appropriateness of their facility for the patient. If possible, arrange for the patient and family to meet with this team and discuss their expectations. It is important to learn the visiting hours, since families are often not prepared for the limited visitation policies of many rehabilitation centers.

"Realistic rehabilitation goals should be discussed several times, as the patient and family may not hear them the first time."

For the patient going to a nursing home, two very different alternatives exist:

1. A skilled nursing facility for short-term rehabilitation.
2. A nursing facility as a permanent resident when the family is not able or does not choose to care for the patient at home.

For a patient going to a nursing home short term, the patient and family preparation and expectations are similar to those of transfer to a rehabilitation facility. Most families have concerns about the stigma of a nursing home. Once they realize the goal is to provide services not available in the home and to ultimately discharge the patient home, they are more comfortable with the decision. It is important to stress that while the patient will receive intensive therapy,

"Whatever rehabilitation options are chosen, patient and family need support and reassurance as the patient reintegrates into the family system. Stroke Clubs are effective in this reintegration."

a nursing home is not a hospital. The family must be prepared for the differences in staffing and therapy.

It may be devastating to patient and family if a long-term facility turns out to be indicated. Guilt may overwhelm the family. The patient may withdraw or may blame the family for abondonment. The family may feel frustrated and also withdraw from the patient. The physician can often lessen these reactions by preparing patient and family for long-term care. Discuss the alternatives, allowing patient and family to share their feelings. In some cases, it may be necessary for the patient to go home before it is realized that this alternative will not work.

Whatever rehabilitation options are chosen, patient and family need support and reassurance as the patient reintegrates into the family system.

Stroke Clubs are effective in this reintegration. They are particularly successful in addressing the problems of resocialization, patient and family education, and depression. Studies show involvement in a self-help group improves the outlook and hopes of the members. Members of such a group differed significantly from a sample of other vocational rehabilitation clients in manifesting a more hopeful attitude in their planning and discussions about their disability. As patients gain from the recreational, social, and educational opportunities, so too, does the family. The amount of family involvement may be a factor that helps maintain the patient in the home through the education and support it provides. Johnson[4] relates from his experience following his stroke, "I urge any physician caring for stroke patients to take advantage of the excellent therapy . . . knowing how many persons suffer strokes each year and observing the scarcity of new members in my club lead me to believe that an important form of therapy for stroke patients is being overlooked. I have received the greatest stimulus to rehabilitation from my fellow stroke club members."

One of the authors (DDC) initiated the formation of the first stroke club in metro Atlanta at Georgia Baptist Hospital. Experience there and with other stroke clubs in the state amply supports Dr. Johnson's statement.

One Family's Personal Experience

One of us (DDC) had the good fortune of working with one stroke patient and his caring and dedicated wife. Her words express most eloquently all the issues addressed in this paper.

At the time of Frank's first stroke, in July of 1982, my husband was a 55-year-old manufacturing engineer at General Electric Company, a position which held a great deal of responsibility and authority. His personality was cheerful and happy, and he possessed a keen sense of humor, a great deal of wit and wisdom, and he was well liked and respected at work and among his friends. He was very knowledgeable about history, had a brilliant and retentive mind, and was an avid speed reader. We had (and still do have) a very happy, close marriage during which we raised four children to adulthood. We loved doing things as a family, such as going on trips and excursions which we continued to do after they were grown. We had an active social life which often included going to concerts, plays, or out to dinner.

Since Frank's strokes, however, all of these activities have been curtailed or discontinued altogether, as he is paralyzed on his right side and walking with a cane is slow and tedious. Some distances are too great for him, and we occasionally use a wheelchair. His ability to concentrate is diminished as well as his understanding of anything at all complex. It is difficult for him to follow lengthy conversations so he needs to be spoken to directly for him to take part in conversations. He is unable to do many of the things he did before, including any paper work and/or writing.

As a result, therefore, I am in charge of everything pertaining to the house, including all of the bookkeeping, house finances, repairs, and yard work. Much of this Frank used to do, including the household repairs, as he has an extensive workshop and his engineering background enabled him

to repair just about everything.

I neglected to mention that for 2½ years after his first stroke, Frank was much more independent than he has been since December, 1984, when he had a second stroke. This time it affected his speech and his concentration. His general physical condition has also deteriorated. Before the second stroke he was able to move about the house alone, so I did not need to have someone with him at all times, as I do now. I have a nurse's aide four times a week for 6 hours per day, but the rest of the week I am on my own. Having to depend on others to stay with Frank if I need to leave the house for any length of time has been a difficult adjustment. At this point, he is unable to get up from a chair or bed alone, and he needs someone to walk with him, as he is unstable at times.

> *"'Since Frank's strokes, his personality has changed, which has necessitated a tremendous emotional adjustment for me.'"*

As far as our friends are concerned, some have been very thoughtful. One in particular comes over regularly to visit. Others call often and ask how he is, but getting together is a rarity. Unless I take the initiative to make a date to go out with friends, they don't include us in their plans. I guess people have difficulty coping with illness or don't want to face the fact that they too, are vulnerable if this tragedy can happen to one of their comtemporaries.

In addition to a diminished social life, another big change for me has been having Frank dependent on me, whereas he had previously been my strength. Fortunately, he is still able to take part in much of the decision making and I consult him because, first, I still value his opinion, and second, I want him to feel needed and a part of the mainstream.

Since Frank's strokes, his personality has also changed, which has necessitated a tremendous emotional adjustment for me. He used to be affectionate, thoughtful, humorous, and very considerate of me, and I really miss these qualities in him now. No longer can he buy me a present, hold the door open for me, or give me a meaningful hug. Nothing can replace these little thoughtful, caring gestures. Frank's condition necessitates his sleeping in a hospital bed, so I am alone in ours. This is lonely for both of us.

Our children are all very caring, thoughtful individuals, but they too, have been affected. They had a father who was strong, and now he is weak; independent and now needing to be taken care of. They stay with him on occasion when I go out, but their time is limited. They find themselves often torn between wanting to come here to visit with their Dad and having responsibilities at their homes.

At this point in time, I feel we are all adjusting to Frank's condition. I have maintained my usual activities consisting of teaching and playing the piano, playing tennis, participating in organizations, and seeing friends. Together Frank and I attend a monthly Stroke Club, and I am in the process of trying to organize a support group for wives of stroke patients. I feel we can help one another by providing understanding and support as well as giving each other helpful information. We can learn from one another's experiences. I would also like to see us help other wives who are in the same position, but in the initial stage when they need help the most. Meeting with someone who has been through it all would have been so helpful to me, I know. If women who have had a mastectomy can help those who are about to have similar surgery, why not wives of men who have had a stroke? The social workers in the hospitals are helpful and considerate, but they don't necessarily have first hand experience.

Another change in my life has also been the fact that my time is often not my own. If I'm home with Frank alone, when he calls me for help or because he needs something, no matter what I'm doing I give him my attention. I know that whatever he needs, it's something he cannot do for himself. Frank's illness has also changed me from a very happy carefree person to a sadder one. Although I take part in various activities (which fill a need for me), I eventually get back home and to the fact that our lives are different now. Our dreams of traveling and enjoying a healthy retirement cannot come true.

The only positive development to come out of Frank's stroke is the fact that I can completely take care of myself and everything pertaining to the household. Before, he did a lot of paperwork and finances; now I do it all. I have become much more independent — I am prepared to take care of myself when I am alone.

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THE TREATMENT TEAM: ESSENTIAL IN THE LONG-TERM REHABILITATION OF THE STROKE PATIENT

MARY H. MARSHALL, PH.D., HERMINA LEVY, O.T.R./L.

The most important component of stroke rehabilitation is a team approach.



THE GREYING of America, the impact of diagnostic related groups (DRGs), on potential earlier discharge from hospitals, and the emphasis in health care on lower cost outpatient services are stimulating a need for increased geriatric rehabilitation in long-term care settings. Approximately 24 million men and women (one in every nine persons) are over 65 years of age. With the present death rate, the older population is expected to increase 35 percent, to 32 million in the year 2000, and will represent 12 to 13 percent of the projected total population of 246 to 260 million people.[1]

There is the expectation that, with the increase in the number of elderly persons, the incidence of cerebral vascular accident (CVA) will increase also. Other environmental and health factors are further contributing to an increase in the incidence of CVA in the younger population. Rehabilitation is an important component of the service needs of those persons suffering from stroke. These needs are being met more and more through skilled nursing facilities, comprehensive free-standing outpatient rehabilitation facilities, home care, and adult day care health centers.[2] These settings not only meet the lower cost demands, but also provide for the long term needs of the stroke patient, particularly rehabilitation.

Dr. Marshall is Administrator/President, Marshall Rehabilitation Centers of Georgia, Atlanta; and Ms. Levy is Occupational Therapy Supervisor, Rehabilitation Center, West Paces Ferry Hospital, Atlanta. Send reprint requests to Stroke Subcommittee, American Heart Association, Georgia Affiliate, 2581 Piedmont Rd., P.O. Box 13589, Atlanta, GA 30324.

The Rehabilitation Treatment Team

The most important component of stroke rehabilitation is a team approach that identifies, treats, and meets all of the need of the patient and his/her family.

A number of disciplines, including audiology, occupational therapy, physical therapy, speech-language pathology, restorative nursing, psychology, and social work are involved in this total service. The needs of the stroke patient require this team working together on a long-term basis to ensure the improvement of functional abilities and, at the same time, to prevent deterioration. Though these services should continue following hospitalization or, if not addressed in the acute hospital, be initiated immediately upon discharge, patients

THE REHABILITATION TREATMENT TEAM (below) works together, communicates and coordinates its efforts on a daily basis, and discusses the patient's status, recent achievements, and problems through weekly rounds. The meeting may result in modifying the general treatment plan, revising particular goals, or developing strategies for new and unexpected problems.





Biofeedback is used by the occupational therapist and physical therapist to reeducate the muscles affected by stroke. The purpose of this kind of therapy is to reteach functional skills such as arm movement and walking.



The speech-language pathologist addresses difficulties such as language problems evidenced by deficits in understanding and expressing both verbal and written messages, motor problems evidenced as dysarthria or oral dyspraxia, poor cognitive skills, and visual perception deficits. With some patients, the speech-language pathologist will determine if a non-verbal communication system is indicated and introduced augmentative communication devices.

referred even 6 to 12 months post-stroke can make and maintain significant functional gains.[3] Many stroke patients with additional medical problems can benefit from intensive rehabilitation. Complications should not preclude the referral to the rehabilitation team.[4] This team of professionals works with the family to motivate the patient to reach and maintain the highest level of functioning possible.

"The needs of the stroke patient require this team working together on a long-term basis to insure the improvement of functional abilities and, at the same time, to prevent deterioration."

The team identifies the needs of the stroke patient and decides which services will be beneficial. Hearing deficits are evaluated by the *audiologist*. Though many hearing problems may be related to age, there are perceptual and sensory deficits associated with stroke. The audiologist differentiates the type of hearing problems and works with the patient in remediation. Often, assistive listening devices are recommended. *Occupational therapy* is involved in evaluating and planning treatment in the areas of swallowing and feeding, relearning of self care skills such as dressing, restoration of function incuding strengthening and coordination to the affected upper extremity, writing, cognitive retraining, and visual perception. Often the use of adaptive techniques and equipment are included. The *physical therapist* works with the patient to facilitate transfers, ambulation, and mobility. Muscle re-education, overall strengthening, range of motion, balance, bed and wheel chair mobility are among the areas addressed by this professional.

Often there are communication problems as a result of stroke.[5] The *speech-language pathologist* addresses difficulties such as language problems evidenced by deficits in understanding and expressing both verbal and written messagaes, motor problems evidenced as dysarthria or oral dyspraxia, poor cognitive skills, and visual perception deficits. With some patients, the speech-language pathologist will determine if a nonverbal communication system is indicated and introduce augmentative communication devices. The *social worker* and *psychologist* are involved with adjustment problems that may be experienced by the patient and the family. These services are often provided during the time that skilled therapy is involved, but can also continue on a longer term to provide help to the patient and the family to learn to live in a changed environment.

Restorative nursing is involved in many aspects of the program, particularly in the skilled nursing facility, through home care services and in day care. Many self care skills are taught, such as bowel and bladder training. Nursing often carries through with feeding programs and is an integral part of supporting and enhancing therapy programs throughout the day.

"An ongoing program of maintenance and prevention is also the responsiblity of the rehabilitation team. Disuse of both the affected and unaffected areas and the lack of opportunity to use the rehabilitated skills can result in regression."

The *family* is also an integral part of the rehabilitation team through providing support for the patient and carrying through with the many aspects of the rehabilitation programs.

It is important to remember that it is the combination of needed services that makes the rehabilitation program work. As suggested above, the potential problems of the stroke patient involve motor skills and coordinated movement (legs, arms, oral), strength, swallowing, daily life tasks (dressing, feeding, making beds), visual and hearing deficits, perceptual deficits, cognition and communication, as well as the patient and family response to these problems. Other disabilities may also influence the rehabilitation process. These range from the problems cited above to contractures, incontinence, organic deterioration and pre- and post-stroke medical conditions, such as cardiovascular conditions. All or many of these deficits and problems can be controlled completely or partially and the quality of life enhanced for the patient through comprehensive rehabilitation, patience, and time.

An ongoing program of maintenance and prevention is also the responsibility of the rehabilitation team. Disuse of both the affected and unaffected areas and the lack of opportunity to use the rehabilitated skills can result in regression. With appropriate follow-up, this can be minimized and/or prevented. Each discipline involved in the rehabilitation team communicates on a continuing basis to determine the services needed for the patient, the most appropriate place for the services to be rendered, and the need for ongoing monitoring. The team members interact. The speech-language pathologist may instruct the other disciplines how to communicate with the patient; the occupational therapist may instruct nursing on positions to enhance feeding; the physical therapist may assist the activity director or family on how the patient ambulates most effectively. It is a team approach that works.

The rehabilitation needs of the stroke patient may be served on a long-term basis in a skilled or intermediate nursing facility, in the home with friends or relatives, living alone with some supportive services, in a rehabilitation day care facility, or through an outpatient rehabilitation center. Over the course of treatment, several of these sites may be involved. As the patient improves and stablizes, maintenance and prevention programs are planned and monitored.

"Many stroke patients with additional medical problems can benefit from intensive rehabilitation. Complications should not preclude the referral to the rehabilitation team."

The severity of disability and the rehabilitation needs of stroke patients will vary widely. Some of these needs are often long term. With the members of the comprehensive rehabilitation team working together, the functional status of the patient and, therefore, the quality of life, will be maximized and enhanced.

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THE STROKE PATIENT: NURSING CARE AND HOME HEALTH SERVICES

CAROLYN B. DAVIS, M.S., R.N., PATRICIA A. SZUCS, M.S.N., R.N.,
NOVA JANE McCOMBS, M.N., R.N.

All patients discharged directly home from the hospital after having a stroke should be considered for home-delivered services of nursing and/or therapy, if they are to be homebound at the time of discharge. Examples of services that may be needed are discussed.

Planning for the rehabilitation of the stroke patient should include care after discharge from the hospital, rehabilitation center, or extended care facility. Outpatient therapy services and home health care can provide continuing care for the patient and support for the family.

Long-term care for the stroke patient should begin in the acute phase while the patient is in the hospital setting. For the family, this is the beginning of a crisis stage when they have to begin dealing with the new physical, emotional, and financial demands. The patient may be limited and unable to participate in planning for post-hospital care due to the residual impairments of the stroke. The patient and family need to understand what is available in health and rehabilitative services. Nursing care and home health services in the community are important links in the rehabilitation process from hospital or extended facility to ambulatory community services.

Who Should Receive Home Health Services?

All patients discharged directly home from the hospital after having a stroke should be considered for home-delivered services of nursing and/or therapy, if they are to be homebound at the time of discharge. Example of services that may be needed would be:

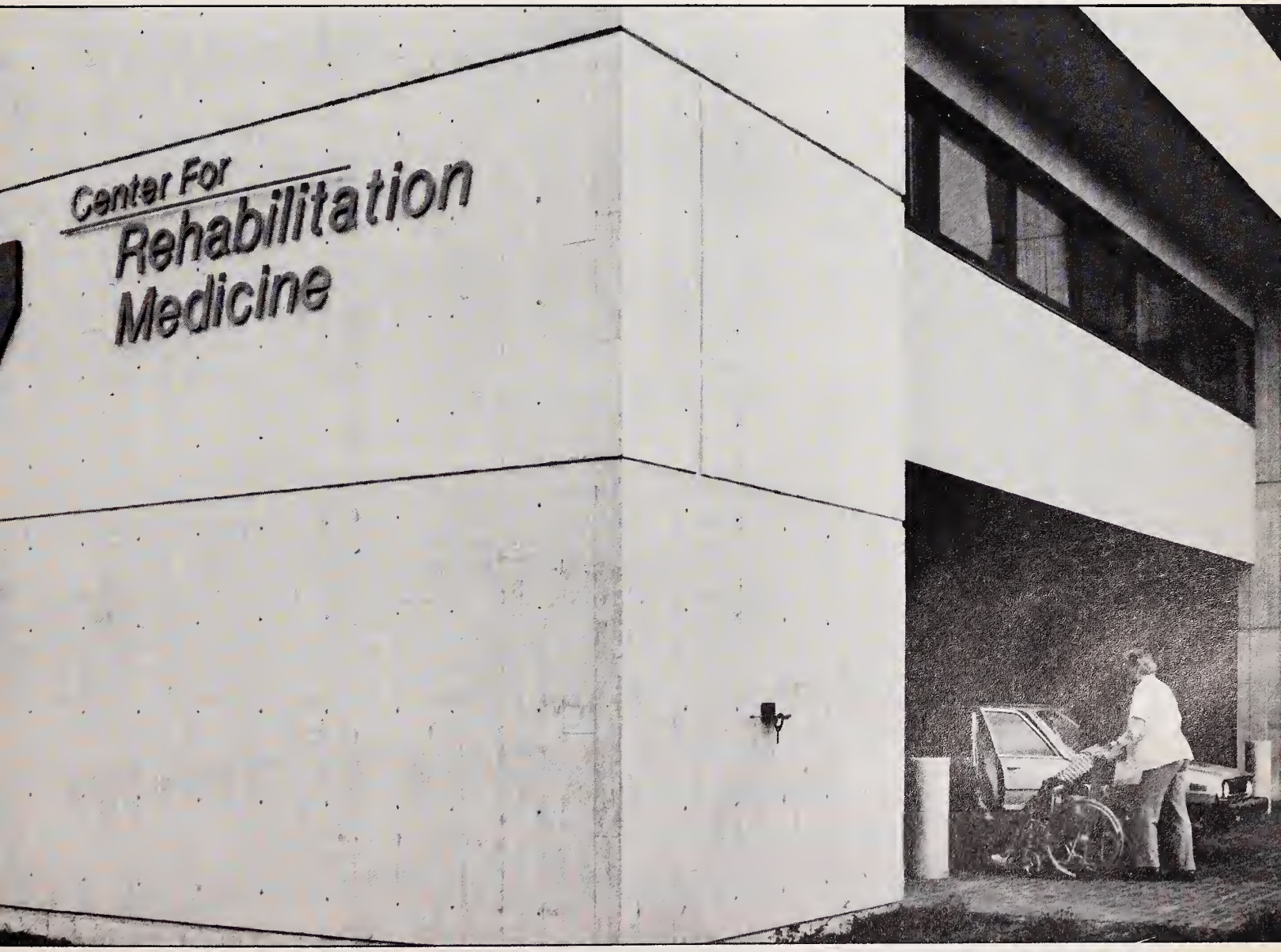
- teaching family/caretakers how to provide rehabilitative care that would increase the patient's independence,
- home modifications and adaptations,
- continuation of specific therapeutic modalities toward maximal benefit,
- monitoring for post-stroke complications, and
- giving emotional support to assist the family and patient make the transition back into the home.

Ms. Davis and Ms. Szucs are with the Visiting Nurse Association, Metro Atlanta, Inc.; and Ms. McCombs is Manager, Aging Program, Georgia Department of Human Resources. Send reprint requests to Stroke Subcommittee, American Heart Association, Georgia Affiliate, 2581 Piedmont Rd., P.O. Box 13589, Atlanta, GA 30324.

Discharge from hospital to home care may be most appropriate for the patient who has a caretaker (spouse, relative, or other) available in the home to provide or supervise the care the patient cannot perform alone. The caretaker would need to continue the therapy programs as directed by the specific therapist.

Patients requiring moderate to maximal assistance with ambulation and self-care may need longer periods of therapy and may not be "candidates" for home care. However, the patient with less severe physical needs may benefit from short-term home-delivered services to monitor carry-over of skills from the institution into the home and to determine if specific resources are needed (e.g., meals-on-wheels, part-time sitter/attendant, additional counseling to assist patient/family in coping with changes). Sending these patients home without follow-up does them an injustice and may cause loss of skills and coping mechanisms learned as an in-patient.

Patients who are to be homebound following care in rehabilitation centers or extended care facilities (ECFs)



Planning for the rehabilitation of the stroke patient should include care after discharge from the hospital, rehabilitation center, or extended care facility. Outpatient therapy services and home health care can provide continuing care.

may benefit from short-term home-delivered services by one or more disciplines. This is especially true of stroke patients who can no longer qualify for full Medicare coverage in ECFs.

Who Pays For Home Health Services?

Home Health Services provided to an individual who has had a stroke may be paid for, totally or partially, by Medicare, Medicaid, Veterans Benefits (CHAMPUS), or private insurance. The patient, if he/she has no third party coverage, can also purchase home health service through private pay.

"Nursing care and home health services in the community are important links in the rehabilitation process from hospital or extended facility to ambulatory community services."

In Georgia, Medicare and Medicaid account for the coverage of the majority of home health services provided to stroke patients. Medicare and Medicaid reimburse home health benefits for eligible individuals if the following conditions are met. The individual:

- is confined to his home (unable to leave home without considerable and taxing effort);
- is under the care of a physician;
- requires a "skilled" level of care by nursing, physical, or speech therapy;
- requires "intermittent" care (more frequently than every 60 days, but less frequently than daily);
- has the potential for rehabilitation; and
- requires services that are reasonable and necessary.

What Does Home Health Provide?

Although the eligibility criteria for coverage of home health care by Medicare and Medicaid are similar, the specific services covered vary. Table 1 shows the type of services covered by Medicare and Medicaid.

Table 1: Type of Services Covered By Medicare and Medicaid

Services	*Medicare*	*Medicaid*
Skilled Nursing (RN)	Yes	Yes
Physical Therapy (PT)	Yes	Yes
Speech Therapy (ST)	Yes	Yes
Occupational Therapy (OT)	Yes	No
Medical Social Services	Yes	No
Home Health Aide	Yes	Yes
Homemakers	No	No
Durable Medical Equipment	Partially	Yes*
Medications	No	Yes*

*Under medical benefits, not home health.

There is a great variety of services available to individuals who have had a stroke. These are provided on a private-pay basis or may be partially covered by a commerical insurance health policy. They range from 24-hour nursing care to a few hours of attendant or sitter service. The services are provided by many private companies as well as agencies that are certified Medicare providers.

In selecting a home care provider, some time should be spent in determining the quality of the care that can be expected as well as the agency's ability to provide the type and amount of services requested.

What Do Home Health Services Offer the Patient?

Home health services for homebound stroke patients include skilled nursing care, physical therapy, occupational therapy, speech therapy, medical/social services, and homemaker/home health aides. These professional disciplines can continue the rehabilitative services begun in the in-patient facility. Homemaker/home health aides can provide intermittent personal care and assistance with activities of daily living, currently on a twice-a-week basis through Medicare, if they are supervised by registered nurses. Other skilled nursing services that relate to the medical care of the patient may include taking blood specimens for prothrombin times for patients on anticoagulants and other necessary blood studies. Table 2 identifies problems stroke patients may have that home health services address.

What Are Some of the Psycho-Social Adjustments for the Stroke Patient at Home?

Stroke patients have many psychologic adjustments to make. All members of the home health team must be aware of these. They include:

(1) altered thought processes,
(2) disturbance in self-concept and self-esteem,
(3) ineffective coping, and
(4) catastrophic reactions (lashing out, verbal abuse, non-compliance or lack of cooperation, frustration with the disabilities or stimuli overload).

Support through home visits by nurses and therapists as they provide the "physical care" part of rehabilitation may help prevent crisis situations from occurring in psychologic adjustment. Home health agencies are limited by lack of third-party payment for ongoing counseling and support by home visits from a medical social worker. Reimbursable visits are more limited to crisis intervention or assistance with specific social service programs. Referral to "stroke clubs" and other community resources may be beneficial.

An often neglected part of the rehabilitation process of a stroke patient may be sexuality effects on the patient and stressors identified by their part-

Table 2: Problems of Stroke Patient with Concomitant Home Health Services

Table 2: Problems of Stroke Patient with Concomitant Home Health Services

Altered Nutrition
- RN — dietary teaching concerning therapeutic diet (or enteral feeding if indicated)
- OT — neuro-facilitation techniques, oral-motor exercise, adapted eating utensils.
- ST — evaluation of swallowing

Self-care deficits
- OT — ADL training, activity/exercise program, adaptive equipment, home modification, homemaking skills, non-dominant hand training, energy conservation.

Altered bowel elimination
- RN — teach measures to correct/prevent.

Altered urinary elimination
- RN — teach measures to correct/prevent; change in-dwelling catheters as needed.
- RN — teach positioning, hygienic practices, proper nutrition and fluid; evaluate need for specialized equipment to provide pressure relief.

Impaired physical mobility
- PT — transfer and gait training; bed and wheelchair mobility; therapeutic exercise, assistive devices for ambulation, home modification.

Altered musculoskeletal functions (actual or potential, e.g., contracture, subluxation, painful shoulder, dependent edema)
- PT — therapeutic exercises, positioning, ultrasound.
- OT — splints, slings, edema control program.

Impaired communication
- ST — oral/motor skills, auditory comprehensive skills, receptive and expressive language skills, articulatory proficiency, voluntary control of speech musculature, provision of alternative mode of communication as needed.

Fluid Volume Deficit (actual or potential)
- RN — medication schedule and compliance, monitor intake and output and sodium restrictions.

Sensory — Perceptual alteration
- OT — sensory stimulation, activity and retraining techniques, home modification, non-dominant hand training.
- RN — safety evaluation and home modification

Knowledge Deficit
All disciplines teach patient/family/caretakers to undertstand the disease process, goals, misperceptions, cognitive deficits related to anxiety, fear, and grief.

ners. Health professionals can provide an open climate for the patient and family to discuss sexuality. Sexually active persons pre-stroke will probably retain interest after stroke, regardless of age. Marron[6] identified six specific secondary factors that commonly influence the sexual behavior of individuals who have had a stroke:

(1) mechanical difficulties caused by limited mobility,
(2) loss or altered sensation,
(3) cognitive and perceptible changes,
(4) urinary or stool incontinence,
(5) side effects of medication, and
(6) preexisting sexual problems and conflicts.

Permission-giving is a fundamental intervention to assure patients and their partners that a resumption of sexual activity will not cause stroke to reoccur. Nurses and therapists can consciously include the healthy partner in the care of the patient so the partner becomes accustomed to touching the stroke patient's body. Explaining the personality changes of any stroke patient and the specific communication problems of an aphasic patient will help the partner understand the behavior. Suggestions of alternate sexual positions that compensate for specific disabilities may be given. Encouraging the patient to maintain careful personal hygiene and interest in appearance is important; many stroke patients feel less attractive and less feminine or masculine and may not readily talk about these concerns.

All members of the health team must be aware of potential safety problems or forms of elder abuse that can occur when a stroke patient goes home. Potential safety problems may be the result of intermittent assistance/supervision from caretakers. The patient may be in the care of an elderly spouse who may be frail and unable to manage the day-to-day care. The home health agency must be sensitive to these potential problems as they see the patient. To alleviate these problems, additional home services from the community, other family members, or another plan of care may be needed. Financial problems often restrict home health services. Examples are the patient who:

- is too young for Medicare,
- is not financially eligible for Medicaid,
- is unemployed or laid off with no insurance benefits, or
- does not have income to afford attendants for personal care or homemaking.

The home health agency, through their team of nurses, therapists, and social workers, will be needed to recognize indicators of personal and financial problems that impact on the physical and psychologic health as they work with the physician and other appropriate agencies to help the stroke patient obtain the services for maximal recovery.

Summary

Nursing care and home health are links in the rehabilitation process of the stroke patient. Home health can provide the nursing and special therapies to bridge the gap from an inpatient rehabilitation program to the patient and family functioning at their highest potential within the community. There are rehabilitative services in communities for stroke patients. Our challenge is to know the available resources and connect the patient and family to the resources that would benefit them the most.

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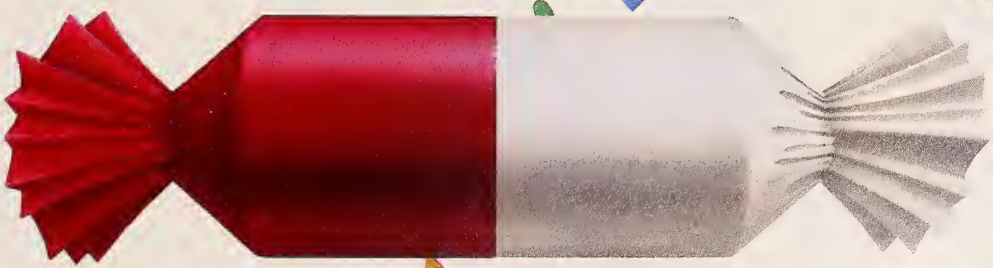
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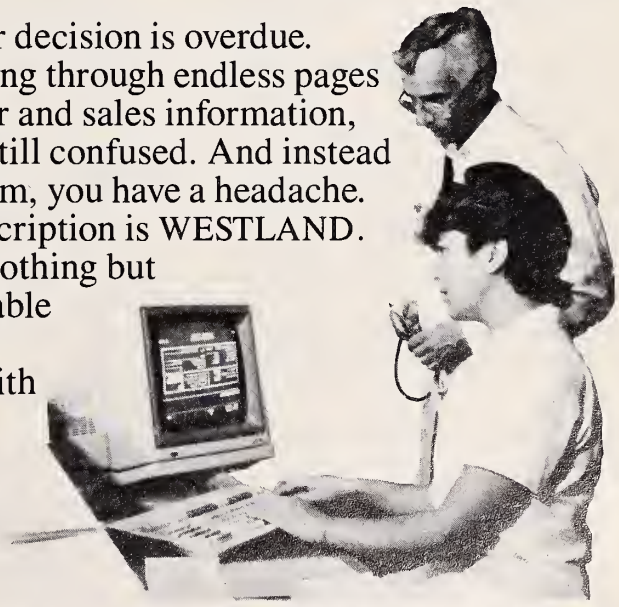
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103 John Maddox Dr., Rome 30161

Bagatell, Carrie J., DeKalb — I&R — IM
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Dept. of Psychiatry, Medical College of Georgia, Augusta 30912

Barak, Yehuda E., MAA — I&R — PDN
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Daus, Kevin M., MAA — I&R — OBG
1114 Moorestown Cir., Decatur 30033

Davis, Bennie L., MAA — Associate — U
35 Butler St., Ste. 202, Atlanta 30335

Davis, John B., Jr., Richmond — ACT
Medical College of Georgia, Augusta 30912

Davis, Timothy E., MAA — I&R, — EM
1369 Holly Lane, NE, Atlanta 30329

Davis, Toni A. (Ms.), Bibb — Student
100 Catalina Dr., Warner Robins 31093

Deibert, Richmond I., MAA — I&R
900 Clifton Rd., NE, Atlanta 30307

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2394 Leafgate Rd., Decatur 30033

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805 Tuxworth Cir., Decatur 30030

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1360 Center Dr., Ste. 100, Dunwoody 30338

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Huff, Philip G., Georgia Medical — I&R — IM
Memorial Medical Center, P. O. Box 23089, Savannah 31403

Hull, Jeffrey F., MAA — I&R — R
3180 Lindmoor Dr., Decatur 30033

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1231 Clairmont Rd., #16-D, Decatur 30030

Khan, Ishtiaq A., DeKalb — I&R — ORS
1231 Clairmont Rd., Decatur 30030

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King, Laurel A., Richmond — ACT — OBG
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2384 Webb Gin House Rd., Snellville 30278

Kirby, Scott G., Richmond — ACT — EM
Medical College of Georgia, HA 107, Augusta 30912

Klochany, Alan, MAA — I&R — AN
1416 Oakridge Cir., Decatur 30033

Kokenes, Costantine, MAA — I&R — AN
519 Clairmont Cir., Apt. 1, Decatur 30033

Koretsky, Peter A., MAA — I&R — GE
226 Elizabeth St., Atlanta 30307

Kozarsky, Alan M., MAA — ACT (N-1) — OPH
25 Prescott St., #3406, Atlanta 30308

Kramer, Douglas A., MAA — ACT — P
6363 Roswell Rd., NE, Atlanta 30328

Kranig, Carol A., MAA — I&R — P
3795 Tuxedo Rd., NW, Atlanta 30305

Krebs, Henry J., III, MAA — I&R — R
4107 Pine Heights Dr., NE, Atlanta 30324

Krohn, Jonathan A., DeKalb — I&R — IM
2204 N. Crosing Way, Decatur 30033

Kuester, Evert E., Clayton-Fayette — ACT — DR
33 Upper Riverdale Rd., Ste. 105, Riverdale 30274

Kyzar, Kent C., Bibb — I&R — FP
1628 Huntley Ridge, Macon 31201

Larsen, Christian P., MAA — I&R — GS
1476 Country Squire Dr., Decatur 30033

Lasker, Steven M., MAA — I&R — AN
1250 Lenox Cir., NE, Atlanta 30306

Leatherburg, Linda, Richmond — ACT — PDC
Medical College of Georgia, BA 804, Augusta 30912

Lefkoff, Larry A., MAA — I&R — OTO
2005 Variations Dr., NE, Atlanta 30319

Lenhart, John P., DeKalb — I&R — PM
1111 Clairmont Ave., #J-6, Decatur 30030

Lenhart, Karen C., DeKalb — I&R — P
1111 Clairmont Ave., #J-6, Decatur 30030

Leskosky, Louis A., MAA — I&R — R
1723 Laurel Creek Cir., Lithonia 30058

Leslie, Donald P., MAA — I&R — PM
3060 Pharr Ct., NW, Atlanta 30305

Lester, James W., Georgia Medical — I&R — DR
Memorial Medical Center, Dept. of Radiology, P. O. Box 23089, Savannah 31403

Levenson, Ilene S., DeKalb — I&R — IM
1418 Tuxworth Cir., Decatur 30033

Levenson, Jeffrey H., MAA — I&R — OPH
1418 Tuxworth Cir., Decatur 30033

Levine, Monore I., Richmond — ACT — ORS
Medical College of Georgia, Augusta 30912

Lieberman, Jonathan S., MAA — I&R — IM
2019 LaVista Rd., Atlanta 30329

Leonardy, Nicholas J., MAA — I&R — OPH
859 Lenox Oaks Cir., NE, Atlanta 30324

Levin, Stuart I., MAA — ACT (N-2) — FP
1150 Grimes Bridge Rd., Ste. 4, Roswell 30075

Licata, Robert M., MAA — ACT — (N-2) — PD
1230 Johnson Ferry Rd., Ste. D-20, Marietta 30067

Linter, Thomas B., MAA — I&R — GS
1047 Bellevue Dr., Atlanta 30306

Little, Thomas, DeKalb — I&R — CD
1972 Spencer Oaks Lane, Lithonia 30058

Lopez, Berto, DeKalb — I&R — OBG
2483-A Briarcliff Rd., Atlanta 30329

Lopez, Orlando F., MAA — I&R — U
419 S. Pineview Ct., Decatur 30030

Ludi, Gary A., MAA — I&R — GS
1042-7 St. Charles Ave., Atlanta 30306

Lunn, Joseph S., Richmond — ACT — IM
Medical College of Georgia, Augusta 30912

Lutcher, Charles L., Richmond — ACT — HEM
1459 Laney Walker Blvd., Augusta 30912

Lynch, Michael E., (Mr.), Bibb — Student
Rt. 1, Box 621, Evans 30809

Maass-Robinson, Saundra A., MAA — I&R — P
3008 Meadowlark Dr., East Point 30344

Malkoff, Marc D., MAA — I&R — N
2307-C Briarcliff, Atlanta 30329

Maloney, John M., MAA — I&R — IM/ID
1115 N. Jamestown Rd., Apt. G., Decatur 30033

Mandelblatt, Steven M., MAA — I&R — NR
1430 N. Crossing Dr., Atlanta 30329

Mansberger, John A., Richmond — ACT — GS
Medical College of Georgia, Augusta 30912

Marcus, Sally J., MAA — I&R — PD
1439 N. Highland, Atlanta 30306

Marshburn, Daniel G., MAA — ACT — AN
353 Parkway Dr., Ste. 101, Atlanta 30312

Martin, Dan C., Richmond — ACT — AN
Medical College of Georgia, Augusta 30912

Martin, William S., MAA — I&R — GS — OTO
3975 Stonewall Tell Rd., College Park 30349

Masor, Jonathan J., MAA — I&R — IM
3450-12 N. Druid Hills Rd., Decatur 30033

Mazur, W.P., MAA — ACT — P
1226 Eleveland Ave., East Point 30344

McDaniel, James E., MAA — I&R — N
1168 McConnell Dr., Decatur 30033

McDonnell, Dennis E., Richmond — ACT — NS
Medical College of Georgia, Augusta 30912

McFarling, Harry M., MAA — ACT (N-2) — OBG
35 Collier Rd., NW, Ste. 320, Atlanta 30309

McKie, Virgil C., Richmond — ACT — PD
1010 Milledge Rd., Augusta 30912

McLendon, Keith M., MAA — I&R — AN
1410 N. Crossing Dr., Atlanta 30329

McMullan, F. Dickinson, MAA — ACT (N-1) — OPH
3280 Howell Mill Rd., Ste. 207, Atlanta 30327

McNeill, William F., MAA — I&R — PTH
1472 Rock Springs Cir., #2, Atlanta 30306

McPeak, Dennis M., MAA — I&R — U
620 Peachtree St., NE, Apt. 1601, Atlanta 30308

McSwain, Heber, F., MAA — I&R — OBG
3000 Andrews Dr., Atlanta 30305

Meador, Kimford J., Richmond — ACT — N
Medical College of Georgia 30912

Mealing, Henry G., Jr., Richmond — ACT — IM/RHU
Medical College of Georgia, Augusta 30912

Meeks, Robert D., Jr. (Mr.), Bibb — Student
943 Walnut St., Macon 31201

Melcher, Richard E., Richmond — ACT — FP/GER
Medical College of Georgia, Augusta 30912

Mennen, Martin, MAA — I&R — EM
2030 Peachtree Rd., NE, #4-A, Atlanta 30309

Michels, Mark, MAA — I&R — OPH
213-B Westminister Dr., NE, Atlanta 30309

Middleton, Henry M., III, Richmond — ACT — GE
BA Medical Center (DD), Augusta 30910

Miller, Stuart P., DeKalb, — I&R — PM
5131 S. Woodbridge, Stone Mountain 30088

Miller, William J., MAA — I&R — PD
1099 Knights Bridge Ct., Norcross 30093

Montana, Eduardo, Jr. (Mr.), Bibb — Student
859 Washington Ave., Apt. 5, Macon 31201

Montgomery, Larry D., MAA — I&R — P
3555-C Clubhouse Cir. East, Decatur 30032

Moore, Holland V., Richmond — ACT — CDS/TS
Medical College of Georgia, Augusta 30912

Mora, Marcelo, Sumter — ACT — FP
201-B Murphy Mill Rd., Americus 31709

Morgan, Gwen V., Richmond — ACT — P
814 Brookfield Pkway., Martinez 30907

Neckman, Charles B., MAA — I&R — CD
9795 Lake Forest Way, Roswell 30076

Nelson, Donald R., Richmond — ACT
Medical College of Georgia, Augusta 30912

Nelson, Rendon C., MAA — I&R — R
1222 Old Countryside Cir., Stone Mountain 30083

Neulinger, Sharon M., MAA — I&R — IM
1292 Oxford Rd., Atlanta 30306

Nguyen, Can X., MAA — I&R — FP
2395 E. Lindmont Ct., NE, Apt. A, Atlanta 30324

Niren, Eileen S., DeKalb — I&R — D
1445-C Willowlake Dr., Atlanta 30329

Nolan, Tomothy F., DeKalb — I&R — P
80 Butler St., Atlanta 30303

Nunn, Pamela E., MAA — I&R — IM
2203 Briarcliff Rd., NE, Atlanta 30329

Nunoff, Douglas A., MAA — I&R — GS/U
3591 Habersham Rd., Atlanta 30324

Oschner, Isabel L., MAA — I&R — EM
2479 Peachtree Rd., NE, Atlanta 30305

Olsson, Jorgen P., DeKalb — I&R — OBG
11 Quail Run, Decatur 30035

Orr, William W., Crawford W. Long — ACT — P
650 Olgethorpe Ave., Ste. Athens 30606

Ozment, Randall R., MAA — I&R — OPH
420 Burlington Rd., Atlanta 30307

Page, Donald A., DeKalb — I&R — IM
1231 Camden Ct., Decatur 30033

Page, Malcolm I., Richmond — ACT — IM
1120-15th St., Augusta 30912-2271

Pallas, Christopher W., Richmond — ACT — IM
Medical College of Georgia, Augusta 30912

Palmer, Robert H., Jr., DeKalb — I&R — OBG
2104 Mallard Crest, Lithonia 30058

Parekh, Kashira D., Muscogee — ACT (N-2) — P
P. O. Box 12435, Columbus 31995-7499

Partin, Clyde, DeKalb — I&R — IM
1001 McClelen Way, Decatur 30033

Pasquariello, John P., MAA — I&R — IM
825 Monroe Dr., NE, Apt. 2, Atlanta 30308

Patrick, Laura E., DeKalb — I&R — R
1231 Clairmont Rd., #14-A, Decatur 30033

Pearson, Thomas C., MAA — I&R — GS
467 Bridlewood Cir., Decatur 30030

Pereira, Eladio, DeKalb — I&R — IM
1399 Southland Vista Ct., NE, Atlanta 30329

Perlman, Sharon, A., Richmond — ACT — PDN
Medical College of Georgia, Augusta 30912

Peterman, Susan B., MAA — I&R — R
597 N. Superior Ave., Decatur 30033

Petit, Brian J., MAA — I&R — GS
106 Valley Brook Crossing, Decatur 30033

Picone, Anthony L., MAA — I&R — TS
409 Emory Dr., Atlanta 30307

Pierce, Michael J., MAA — I&R —
5036 Golfbrook Dr., Stone Mountain 30088

Pilzer, Edith S., MAA — I&R — PD/GE
500 Sutters Pant Dr., Atlanta 30328

Pincus, Steven M., MAA — I&R — IM
3450 Evans Rd., #102-C, Chamblee, GA 30341

Polizos, Victor G., MAA — ACT (N-1) — PD
427 Moreland Ave., Ste. 400, Atlanta 30307

Porter, John G., MAA — ACT (N-1) — AN
5665 Peachtree Dunwoody Rd., Altanta 30342

Poss, Michael A., (Mr.), Bibb — Student
P. O. Box 1052, Canton 30114

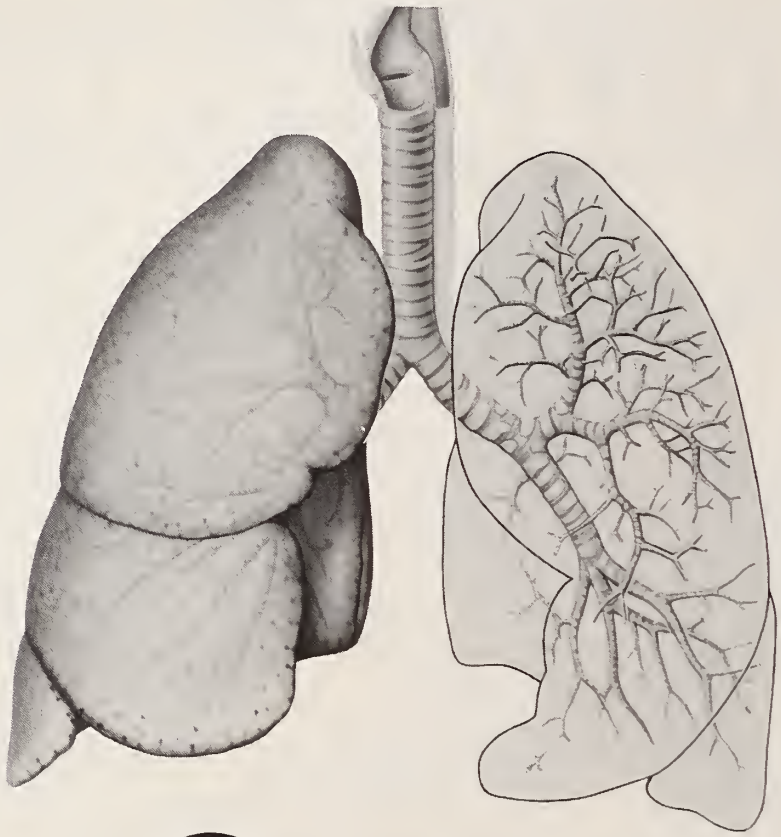
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(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy — *Pregnancy Category B* — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cecfor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

Note: Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* **WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of Dyrenium (triamterene, SK&F CO.) and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

Thiazides may add to or potentiate the action of other antihypertensive drugs.

Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

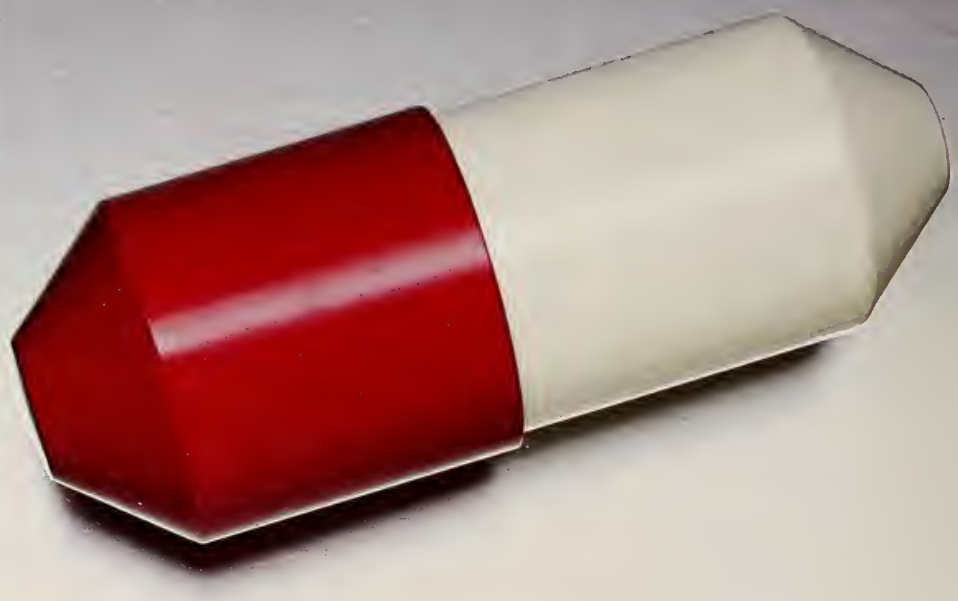
Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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Powell, William T., DeKalb — I&R — EM
1196 Hunters Glen Dr., Stone Mountain 30083

Powelson, Stephen W., MAA — I&R — CD
1068-D N. Jamestown Rd., Decatur 30033

Pugh, Charles M., Georgia Medical — ACT — IM
5354 Reynolds St., Ste. 201, Savannah 31405

Quansah, Felicity A., MAA — I&R — OPH
414 Valley Brook Cross, Decatur 30033

Ragsdale, Joseph W., MAA — I&R — PD
3448-D N. Druid Hills Rd., Decatur 30030

Rabinowitz, Paul S., MAA — ACT (N-1) — AI
5555 Peachtree Dunwoody Rd., Atlanta 30342

Raskin, David A., DeKalb — I&R — IM
1497-D Druid Valley Dr., Atlanta 30329

Read, Elizabeth E., Richmond — ACT — P
310 Cobblestone Ct., Martinez 30907

Reeb, Robert J., Jr., MAA — I&R — R
849 Highland Terrace, Atlanta 30306

Reeves, Walter H., Jr., MAA — I&R — IM
250-15th St., #10, Atlanta 30309

Reindollar, Richard H., Richmond — ACT — OBG
Medical College of Georgia, Augusta 30912

Reisman, A. Gerald, MAA — I&R — PD
379 Eighth St., NE, Atlanta 30309

Reynolds, John L., Richmond — I&R — AN
501 Milledge Rd., #4-C, Augusta 30912

Reynolds, Reubean A., MAA — I&R — OBG
1979 Wrights Way, Jonesboro 30236

Richards, John W., Jr., Richmond — ACT — FP
Medical College of Georgia, Augusta 30912

Riddick, M. Thomas, MAA — I&R — GE
1993 Clairmeade Ave., Atlanta 30329

Register, G. Ashley, Jr., (Mr.), Bibb — Student
Mercer University School of Medicine, Box 17, Macon 31207

Riley, James D., MAA — I&R — GS
2205 The Oaks, Clarkston 30021

Ritchea, Robert M. (Mr.), Bibb — Student
5984 Huddersfield Rd., Macon 31210

Robertson, Alexander F., III, Richmond — ACT — PDN
Medical College of Georgia, Augusta 30912

Rodriquez, Andriana M., MAA — I&R — R
759 N. Superior Ave., Decatur 30033

Rajos, Maximo, Richmond — ACT — P
Medical College of Georgia, Augusta 30912

Rosenberg, Stephen A., MAA — I&R — OBG
13 Queen Anne Rd., Atlanta 30318

Rosenthal, Sanford, I., Georgia Medical — ACT — OPH
5313 Paulsen St., Savannah 31405

Ross, Wayne K., MAA — I&R — PTH
2511 Williams Lane, #4, Decatur 30033

Ruff, Ronald J., MAA — I&R — R
488 Medlock Rd., Decatur 30030

Sabio, Hernan, Richmond — ACT — PD
Medical College of Georgia, Augusta 30912

Sadlo, Henry B., MAA — I&R — IM
304 N. Crossing Way, Decatur 30033

Salam, Tarek A., MAA — I&R — GS
80 Butler St., SE, Atlanta 30303

Scheiner, Michele, MAA — I&R — P
855 Briarcliff Rd., NE, #F-2, Atlanta 30306

Schmidt, David R., MAA — I&R — GS
3450-S N. Druid Hills Rd., Decatur 30033

Schneider, Diane L., MAA — I&R — IM
405 Oakland St., Decatur 30030

Schneider, Michael G., MAA — I&R — AN
791-3 Houston Mill Rd., Atlanta 30329

Schnell, Thomas R., MAA — I&R — IM
Grady Memorial Hospital, Atlanta 30303

Sebring, Stephen F., MAA — I&R — OBG
1150 Collier Rd., NW, Atlanta 30309

Shah, Chandresh, Richmond — ACT — P
1515 Pope Ave., Augusta 30912

Shah, Manoj H., Peachbelt — ACT — OBG
1021 N. Houston, P. O. Box 2105, Warner Robins, 31093

Sheftel, Thomas G., Cobb — ACT (N-2) — IM/ID
833 Campbell Hill St., Marietta 30090

Shor, Robert A., MAA — I&R — IM
3841 E. Hayward Dt., Tucker 30084

Sigsbee, Carl M., St. Johns Parish — ACT (N-2) — IM
218 Fraser Dr., Hinesville 31313

Silbiger, Jill S., MAA — I&R — R
5092 Cold Springs Dr., Lilburn 30247

Silva, Malkanthie I. de, Richmond — ACT — IM/ID
VA Medical Center, Augusta 30910

Simon, Douglas, MAA — I&R — GE
216 Tuxworth Cir., Decatur 30033

Singh, Gobind S., MAA — I&R — EM
545 McKoy St., Decatur 30030

Sisley, John F., Richmond — ACT — GS
Medical College of Georgia, Augusta 30912

Skandalakis, Elias J., Richmond — ACT
1120-15th St., Augusta 30912

Slattery, Michael R., MAA — I&R — NS
1417-C Willow Lake Dr., Atlanta 30329

Slovis, Randall J., MAA — I&R — IM
480 Leonardo Ave., NE, Atlanta 30307

Smith, Ann T., Richmond — ACT — PDN
Medical College of Georgia, Augusta 30912

Smith, James K., Richmond — ACT — PUD
VA Medical Center, Augusta 30912

Smith, Jerry A., Richmond — ACT — PD
Medical College of Georgia, Augusta 30912

Solis, Maurice M., Bibb — I&R
777 Hemlock St., Macon 31208

Sommerset, Angela R. (Ms.), Bibb — Student
Mercer University School of Medicine, Macon 31207

Spilker, Herman L., MAA — I&R — CD
1113 N. Druid Hills Cir., Decatur 30033

Stachura, Maximillian E., Richmond — ACT — END
VA Medical Center, #111-B, Augusta 30910

Stapleton, Dennis J., MAA — I&R — CDS
2292 Ava Place, Decatur 30033

Steele, Betti J., DeKalb — I&R — PD
3205 Fern St., Tucker 30084

Steen, James W., MAA — I&R — PD
5590 Scofield Rd., College Park 30349

Steinhart, Curt M., Richmond — ACT — PD
Medical College of Georgia, Augusta 30912

Stewart, Marguerite R., DeKalb — I&R — OBG
575 Willoa Ridge Way, Avondale Estates 30002

Stewart, Michael W., MAA — I&R — OPH
1374 Teakwood Trail, Stone Mountain 30083

Stone, Jeffrey L., MAA — I&R — GS
1938 Peachtree Rd., NW, Ste. 601, Atlanta 30309

Stout, Mark J., DeKalb — I&R — GS
307 Adair St., B-6, Decatur 30030

Strankman, Nancy A., MAA — I&R — P
P. O. Box 8615, Atlanta 30306

Strauss, Robert M., MAA — I&R — IM
606 Tuxworth Cir., Decatur 30033

Surratt, Wilson F., Richmond — ACT — AN
1124 Oakdale Rd., Augusta 30904

Swindle, Roy F., MAA — I&R — OBG
1430 Stephens, Atlanta 30329

Szczepanski, Duane F., MAA — I&R — AN
898 Piedmont Ave., NE, #4, Atlanta 30309

Tarter, Stanley K., MAA — ACT — OM
2622-G Paces View, Atlanta 30339

Taylor, Richard J., MAA — ACT — OBG
105 Collier Rd., NW, Ste. 2030, Atlanta 30309

Taylor, Rose Marie, MAA — I&R — IM
2794 Shellbert Rd., Decatur 30035

Tho, Sandra P.T., Richmond — ACT — END
1120-15th St., Augusta 30912

Thompson, Mason P.M., Richmond — ACT — FP
Medical College of Georgia, Augusta 30912

Thorarinsson, Bjorn, Richmond — ACT — IM/PUD
Medical College of Georgia, BAN-622, Augusta 30912

Thurmond, Debra D., MAA — I&R — FP
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PERSONALS

First District

Ivy Shuman, M.D., a family physician in Sylvania, was elected to the Board of Directors of the Georgia Academy of Family Physicians. He has served as an Alternate Director for the past 3 years. He will now be the Director of the First District, representing family physicians in the 19-county area.

Fifth District

Emory surgeon, **W. Dean Warren, M.D.,** has been named President-elect of the American College of Surgeons. Dr. Warren, the Joseph Brown Whitehead Professor and Chairman of the Department of Surgery at Emory University School of Medicine since 1971, becomes the second Georgia surgeon to hold the highest office in that organization. **M. J. Jurkiewicz, M.D.,** Professor of Surgery at Emory, was elected Vice Chairman of the College's Board of Regents.

Sixth District

Internist **James F. Smith, Jr.,** of Macon was elected to Fellowship in the American College of Physicians.

Seventh District

Air Force Reserve Colonel, **James T. Cooper, M.D.,** of Marietta, has been reassigned to Dobbins AFB, as a member of the surgeon's office at Headquarters, Fourteenth Air Force.

Tenth District

George Issahak, M.D., a general and vascular surgeon on staff at Rockdale County Hospital, was recently accepted into the American College of Surgeons.

SOCIETIES

Luther E. Brown, M.D., has been installed as president of the **Bibb County Medical Society.** The medical society's president-elect was *Emory W. Holloway, Jr., M.D.* Other officers are: vice president, *H. Deitz Carpenter, Jr., M.D.;* treasurer, *Minor C. Vernon, M.D.;* and secretary, *Ronald A. Freeman, M.D.*

At the December meeting of the **Floyd-Polk-Chattooga Medical Society,** *Jim Rogers, M.D.,* an OB/GYN in Rome, was elected president for the next 2 years. *John I. Dickinson, M.D.,* and *Joel Todino, M.D.* were elected as new delegates to the MAG. Also elected as alternate delegates to the MAG were *Sam Rigas, M.D.* and *Joe Herring, M.D.*

DEATHS

Louis Abraham Hazouri

Nationally known Columbus neurosurgeon, Louis Abraham Hazouri, 61, died December 9 of a heart attack at his home. Dr. Hazouri was the first neurosurgeon to practice in Columbus. He belonged to the American Board of Neurosurgery, Congress of Neurological Surgeons and Southern Neurological Society. He was past president of the Muscogee County Medical Society and had been chief of staff at The Medical Center. He also served as head of neurology at The Medical Center and Cobb Memorial Hospital. He was a former U.S. Army medical corps captain and had been a consultant to Martin Army Community Hospital. Dr. Hazouri graduated from the University of Florida and Emory University School of Medicine.

He is survived by his wife, three children, and three grandchildren.

QUOTES

There is a woman at the beginning of all great things.
ALPHONSE DE LAMARTINE

It is such a relief to be told the truth.
KATHERINE ANNE PORTER

Love is vital. Love is creation. It is love that shapes the plastic clay into shapes divinely fair. Love carves all statues, writes all poems, paints all canvases that glorify the walls where color revels; sings all the songs that enchant one's ears.
ELBERT HUBBARD

I know the price of success — dedication, hard work and an unremitting devotion to the things you want to see happen.
FRANK LLOYD WRIGHT

Make it your habit not to be critical about small things.
EDWARD EVERETT HALE

The highest reward for man's toil is not what he gets for it, but what he becomes by it.
JOHN RUSKIN

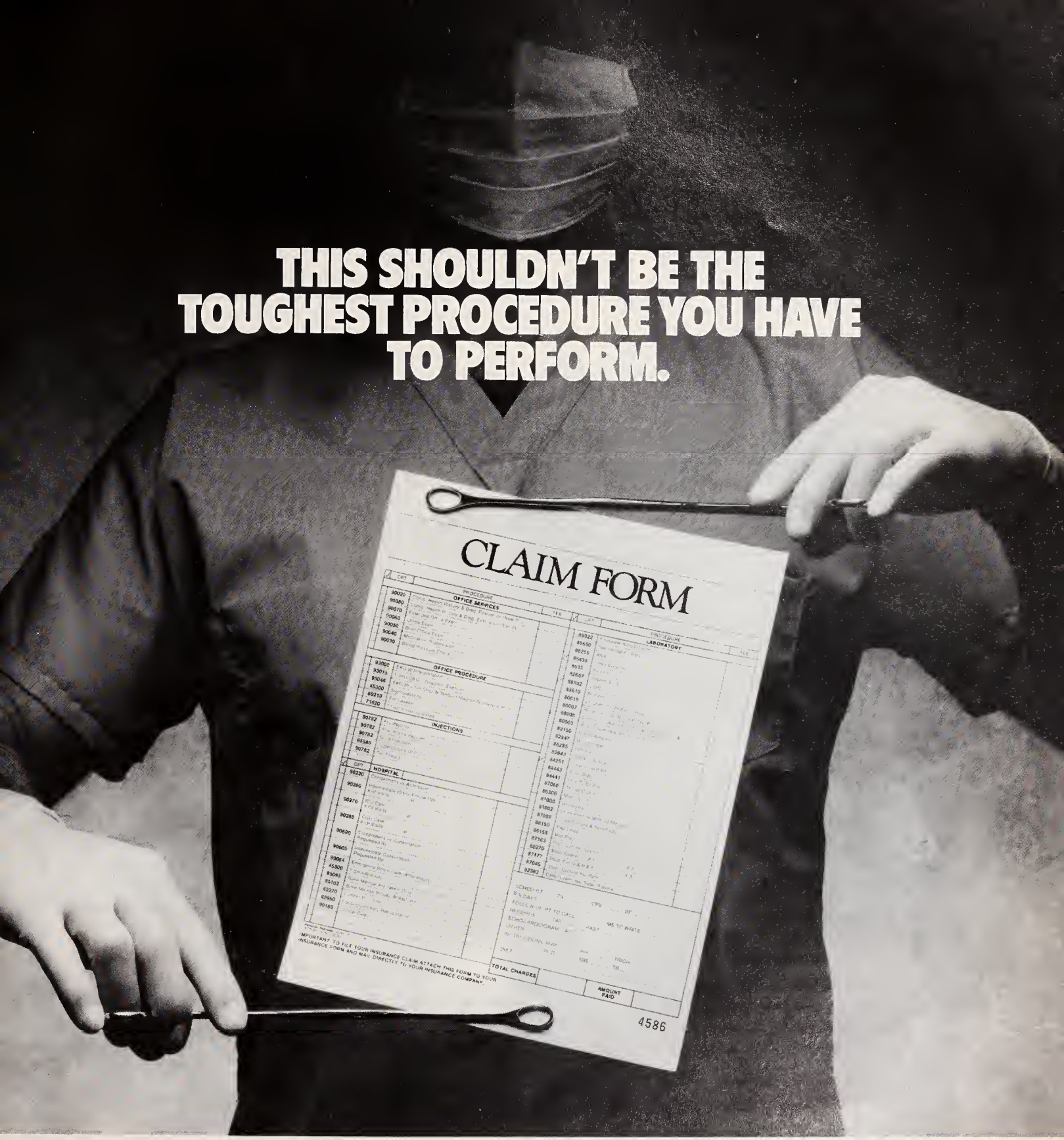
It is a curious fact that people are never so trivial as when they take themselves seriously.
OSCAR WILDE

Beware so long as you live, of judging men by their outward appearance.
JEAN DE LA FONTAINE

The most tragic thing in the world is a man of genius who is not a man of honor.
GEORGE BERNARD SHAW

Exercise is the chief source of improvement in our faculties.
HUGH BLAIR

No man can be happy without a friend, nor be sure of his friend until he is unhappy.
THOMAS FULLER



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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

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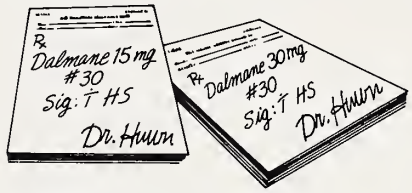
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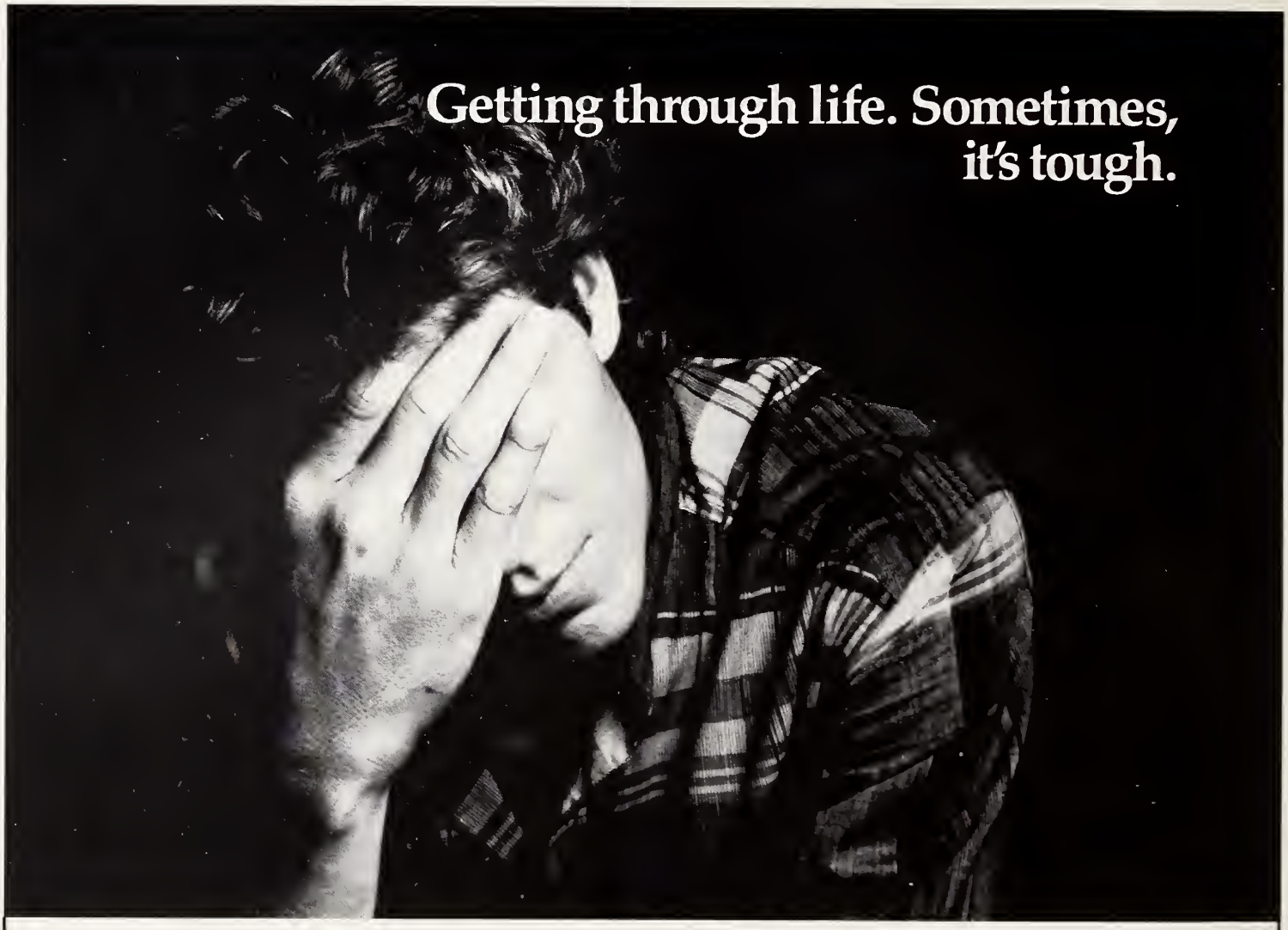
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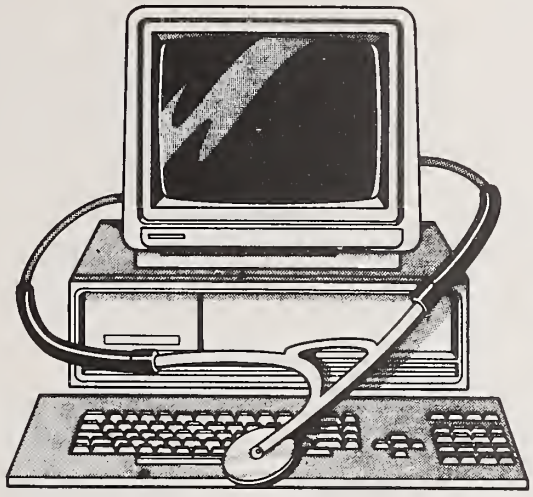
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Preston D. Ellington, M.D., Augusta
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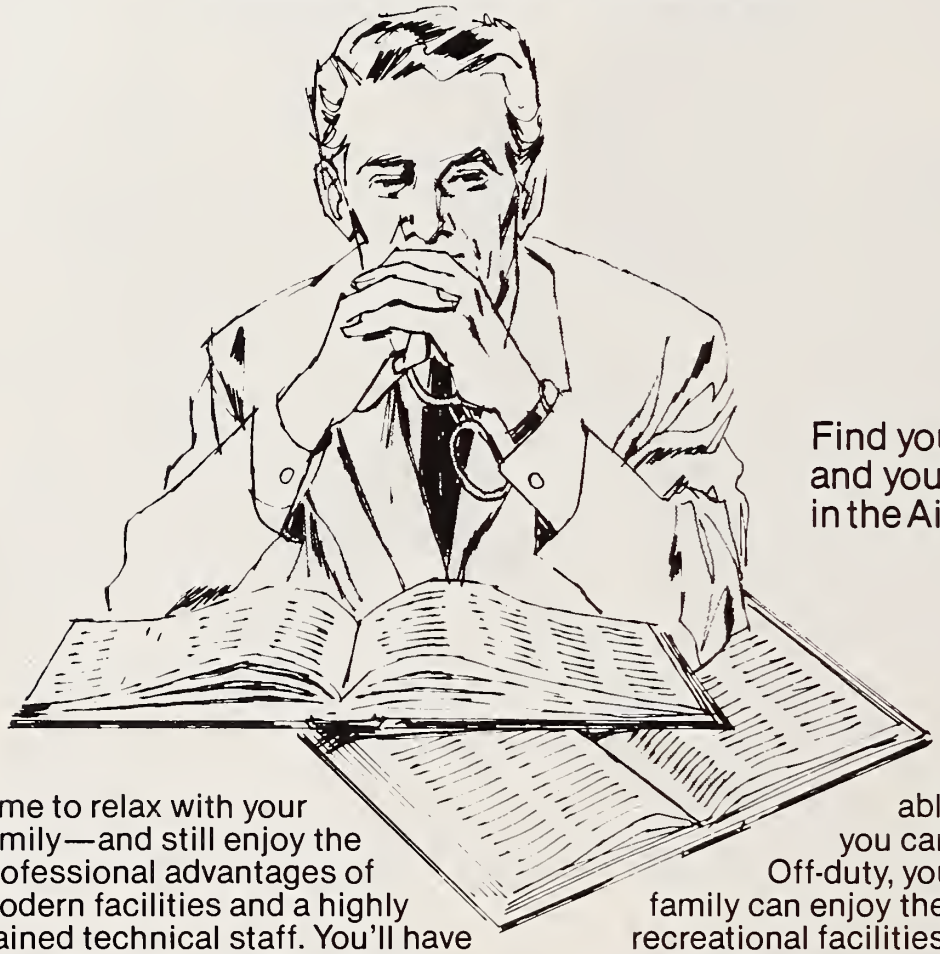
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28-29 — *Callaway Gardens:* **6th Annual Geriatric Conference for Primary Care Physicians.** Contact Dept. of Fam. Pract., Medical Ctr., P. O. Box 951, Columbus 31994. PH:404/511-1337.

31-April 4 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

APRIL

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5 — *Brunswick:* **Diagnosis and Prevention of Cancer.** Category 1 credit. Contact Glynn Brunswick Mem. Hosp., 3100 Kemble Ave., Box 1518, Brunswick 31520. PH:912/264-6960.

11 — *Atlanta:* **Perspectives in Parenternal/Enternal Nutrition.** Contact Jean Robinson, Pharm.D., Metabolic Support Service, Georgia Baptist Medical Ctr., 300 Blvd., NE, Atlanta 30312. PH:404/653-4499.

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8-12 — *Sea Island:* **Eleventh Annual Symposium on Lung Disease.** Category 1 credit. Contact Dianne J. Steele, American Lung Assoc. of Ga., 3452 Spring Rd., Smyrna 30080. PH:404/434-5864.

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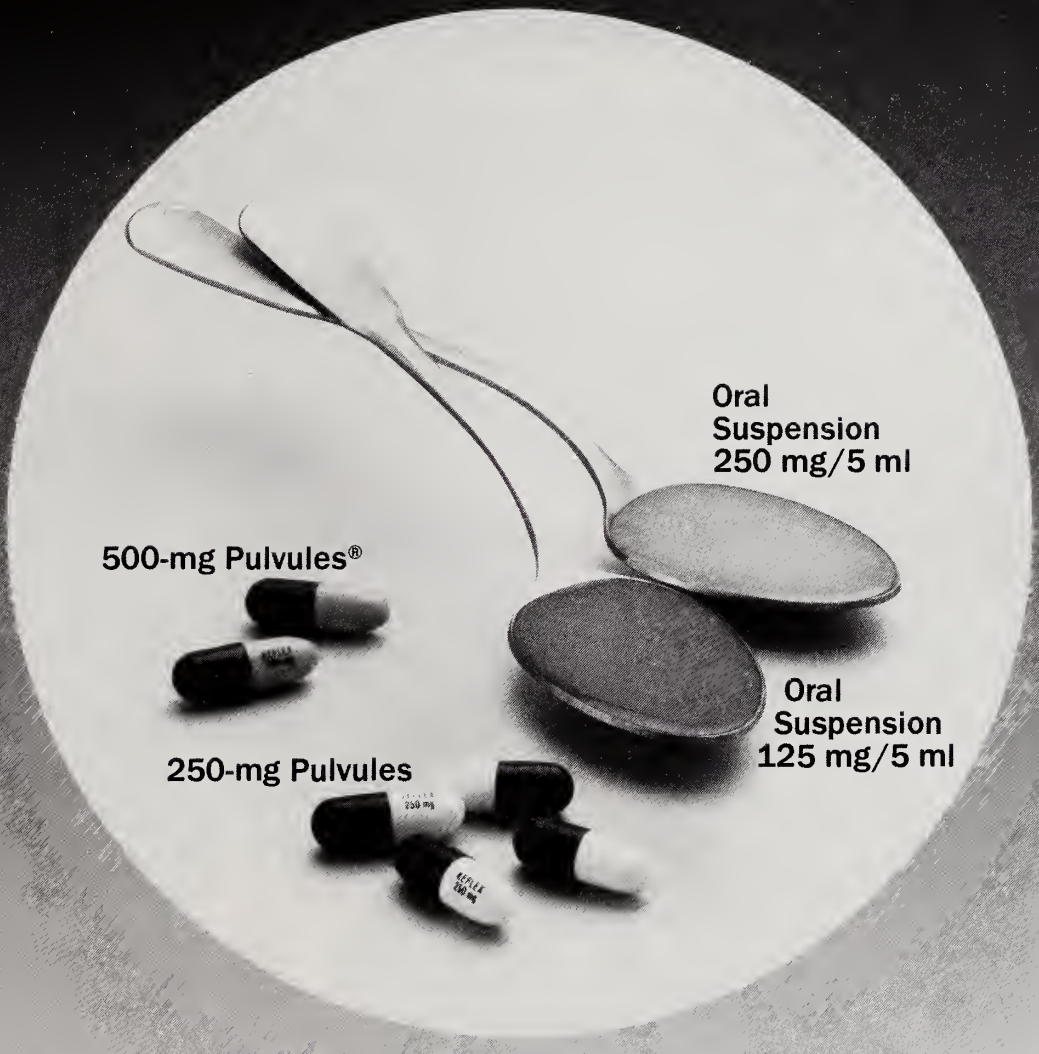
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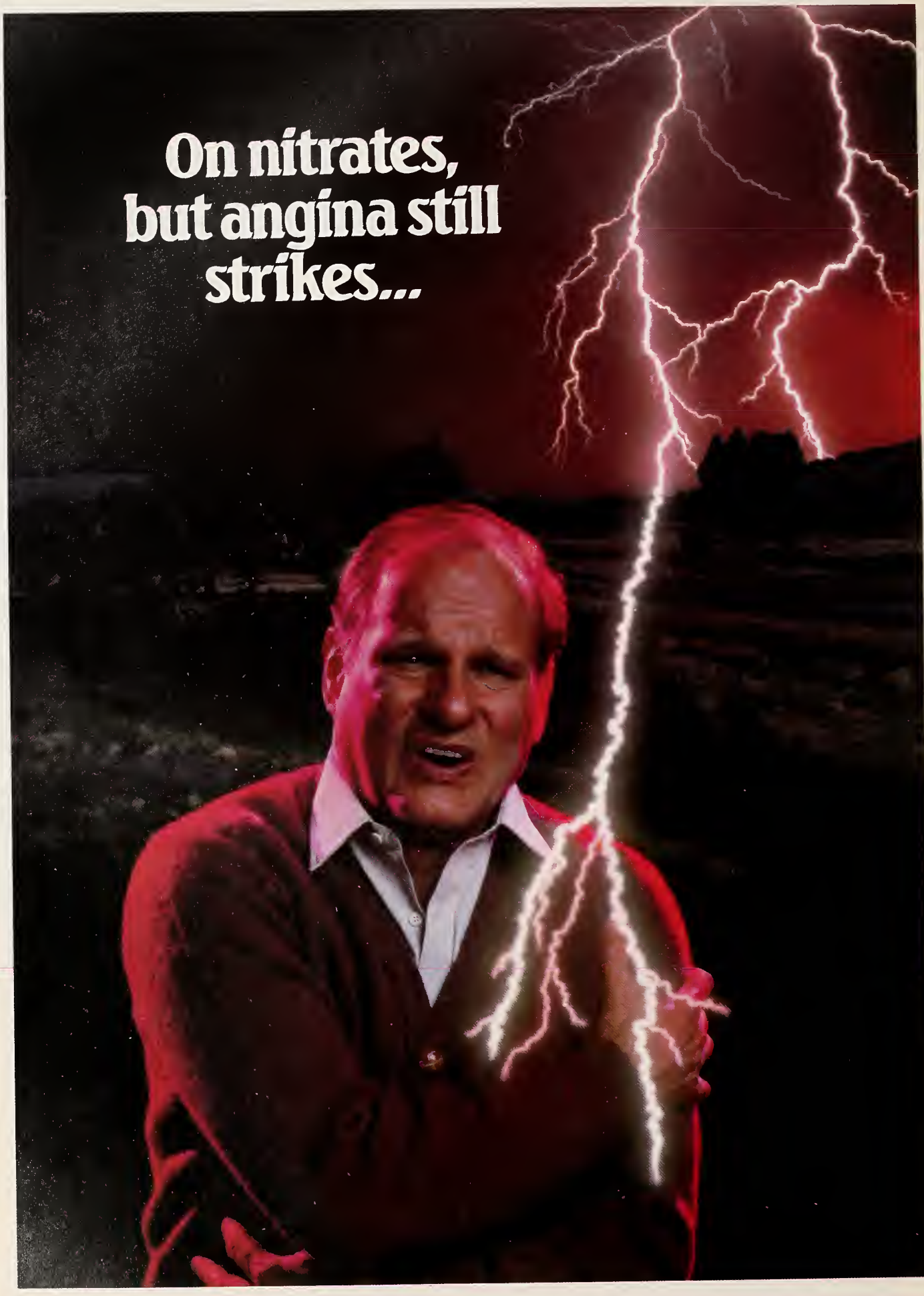
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(See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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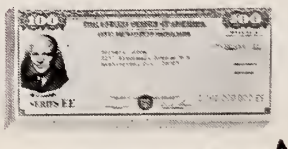


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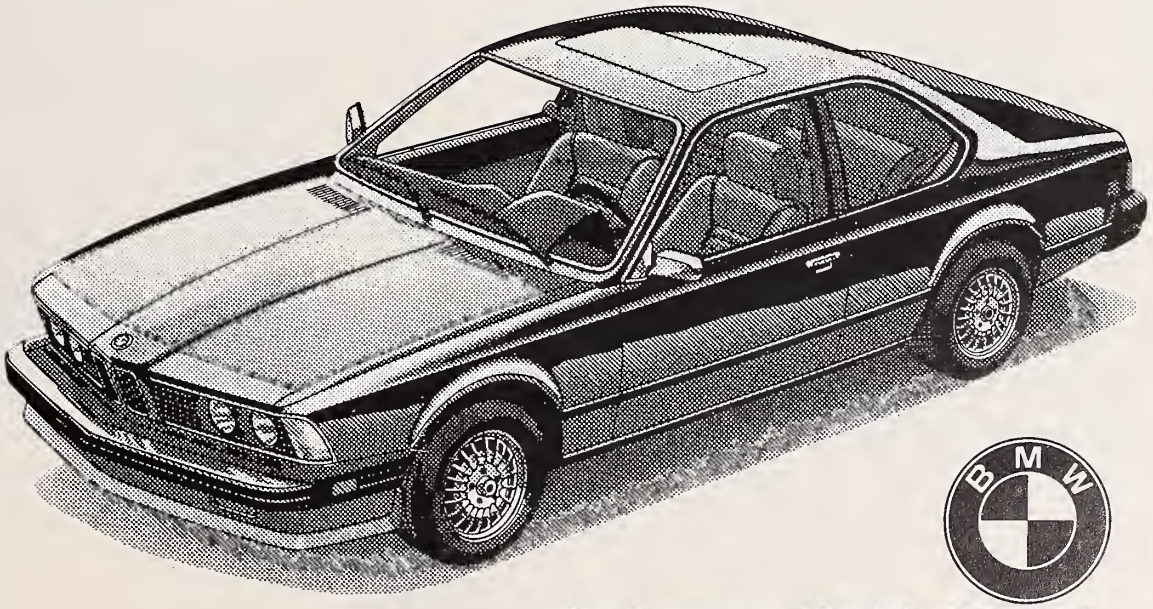
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"To Talk Of Many Things"

This special issue of the Journal *is featuring the Auxiliary and highlighting some of their many activities. It is extremely difficult to adequately express the admiration and gratitude that I feel toward each one of you. Indeed, you have assumed a supporting role and considered all facets of endeavor. No wonder the architects of today are making their foundations and their supporting structures strong but also beautiful. Our Auxiliary has been doing this for a long time. They probably gave the architects the idea.*

From a personal standpoint, I must admit that playing second fiddle is not easy. We know medicine is a great discipline; someone, when counseling spouses, has referred to medicine as "the mistress." But at times it can be demanding, hard, ugly and even foul-smelling. I don't have this picture of a mistress.

Doctors don't need another demanding and ugly thing at home; we do need someone who is interested, supportive, and caring.

I am reminded of some lines by Lewis Carroll:

"The time has come," the Walrus said,
"To talk of many things:
Of shoes — and ships — and sealing wax —
Of cabbages — and kings —
And why the sea is boiling hot — "

Yes, you, the Auxiliary, have thought of all these things and many more.

You have been the "other spouse" and have been able to maintain your rightful place in our hearts as to family and profession. You have thought of many things, as the poet said, and pursued them with clarity and zeal.

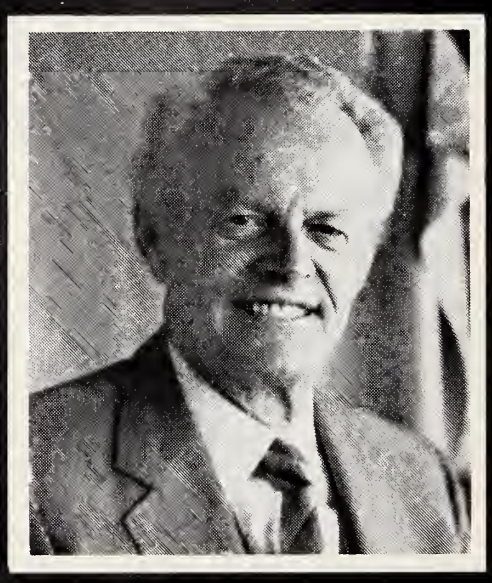
And, I am sure when you have finished, most of the problems, like the "oysters," *will be gone.*

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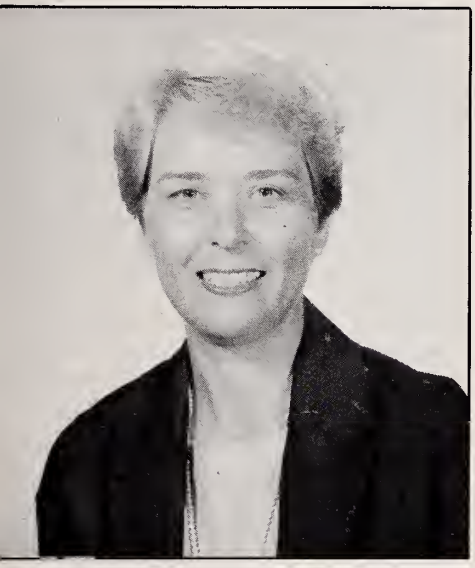
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Caring, Sharing, & Learning





Ann Purcell

Through our numerous Auxiliary projects this year, we have been able to pass on our gift of caring, sharing, and learning — the Auxiliary's theme for 1985-86. We have used the adorable Care Bears to symbolize the friendship and understanding we have shared with each other and so chose to use them on the cover of this special issue of the Journal *devoted to Auxiliary activities in 1985-86.*

We are an organization consisting of physicians' spouses — volunteers having a common bond to work together to improve the health and quality of life for all people. When one looks back to our beginning in 1924, we were formed not as some would believe to be a ladies' social group, but as a group devoted to better health care for the public. Auxilians were asked, starting then, to spread the message about good health issues through organizations in their own communities. These are still our goals today. We have grown from a small group to one of active volunteers numbering over 2500.

As I have traveled our state, I have heard Auxilians express their concerns about the need for personal support, improving the public image of the medical doctor, and about coping with changes taking place in medicine. These changes are bringing about an environment unlike what we have known in the past. This organization has responded to the needs by educating its members about the new environment of medicine. Members have been encouraged to become knowledgeable about today's health issues. We know we must become involved in legislative action, especially as it pertains to medical practice. This involvement is necessary now and must be continued until we have legislative relief. The liability crisis did not become a problem overnight; thus, the issue will not be solved overnight. The Auxiliary believes that if we continue to work together with determination, we will succeed! It is our responsibility to let the public know that physicians are not self-serving and that they have dedicated their lives to helping others.

For 61 years, the Auxiliary to the Medical Association of Georgia has participated in activities that meet the health needs in individual communities. It has also supported the programs of the American Medical Association Auxiliary and assisted the medical profession in many health-related projects. We are a powerful factor in health care issues. As we unite with the Medical Association of Georgia, we will *reach our goals. Dedication, commitment, cooperation, and the sincere concern of each of us will contribute to our continuing success. Working together as a TEAM, we will meet the challenge of the present and the future. With this determination, we will achieve positive results because we are primarily caring persons!*

Mrs. Dent W. Purcell (Ann)
President, A-MAG, 1985-1986
Past President, Georgia Medical Auxiliary, Savannah

Cooperative Action: The Medical Association and Auxiliary Team



Mary Kay McPhee (Mrs. William R.)
President, AMA Auxiliary

In the last 5 years, a truly extraordinary phenomenon has occurred. We have seen county and state medical societies throughout the nation come to the realization that they and their auxiliaries have the potential to become a powerful alliance. What was once viewed as a comfortable and occasional social relationship between the two organizations is being thoughtfully reexamined and reevaluated. It is almost as if medical associations are just discovering auxiliaries for what they can be, as if they are realizing that separate courses are not appropriate for either group.

This move to a true team effort is rapidly spreading across the medical organizations. Auxiliary members are being asked to serve on medical association committees or commissions. They are being asked to represent the medical association outside of the organization. Medical societies and auxiliaries are sharing information, working on cooperative projects, and mounting joint public relations campaigns.

"Medical Auxiliary/Medical Society: How To Make Them a Team" is the title of a new booklet the AMA Auxiliary has prepared to offer ideas on how auxiliaries can strengthen their relationships with their medical associations. It is a publication whose time has come.

Teamwork is a pervading force which is bringing new members, positive action, and tangible results to both organizations as we move to our proper position of sharing pieces of the responsibility for our common goals. And teamwork is especially important today when the medical profession is facing unparalleled challenge — and physicians' spouses are as equally challenged in trying to cope with this changing world of medicine.

Auxiliaries can be vital forces and invaluable assets to their medical associations in helping them meet the challenges that face medicine today. Each of our organizations at all of their levels has legitimate choices and alternatives to help affect the most promising system of general health on the earth. It is a commitment we must be proud to accept, accept together, and accept in the name of organized medicine.

"Auxiliaries can be vital forces and invaluable assets to their medical associations in helping them meet the challenges that face medicine today."

Today is the day to go out, join forces with your medical association, and become a team — so that the challenges that confront us on every hand do not erode the traditions we hold dear; but rather, that those challenges are the means through which our unified efforts become more relevant to our times and more effective for those we seek to serve. ■

The Auxiliary: Where Is It Heading? What's In It For Me?

IF A FRIEND, relative, or stranger were to ask you, "What is the purpose of your medical auxiliary," or "What does your medical auxiliary do," what would you tell them? You might say that the medical auxiliary is an organization that seeks to improve the health and welfare of the people in the community and operates under the guidance of the medical society.

That is the what-is-the-purpose answer, but can you give the "how" answer?

"Medical societies and medical auxiliaries working together isn't really a new concept, but perhaps it is one which has not been developed to its fullest capacity."

Recently, my seventy-plus-year-old aunt asked me those very same questions. I began my explanation by enumerating the activities and projects of the auxiliaries, listing the four main areas of endeavors — Health Care Projects; Membership; Legislation; and Fund Raising for AMA-ERF and the Dr. William R. Dancy Fund for the benefit of medical students, colleges, and research.

I told her of the auxiliaries' federated structure composed of three levels; county, state, and national auxiliaries, all working individually but with common goals.

However, just enumerating the activities does not totally answer the "how" of auxiliary. AMA Auxiliary President, Mary Kay McPhee (Mrs. William R.), stated in a published interview that, "the Auxiliary is truly an example where the whole is greater than the sum of its parts. There would be no successful activities without the talents and skills of the members. They bring to the fore valuable leadership and experience to meet the challenges facing the medical world today. They have proved to be enlightened, caring individuals with a joint purpose — to be involved in meaningful community service projects that will make a difference in the world around them."

"Where is the Auxiliary heading?" is a complex question with a myriad of answers. The practice of medicine and the medical climate is changing; therefore, it follows that auxiliaries must change. And they *are* changing. One should stop from time to time, take the pulse, review the charts, and analyze the progress. Who are we? Where are we going? Where do we want to be?

Medical societies and medical auxiliaries working together isn't really a new concept, but perhaps it is one which has not been developed to its fullest capacity. As stated earlier, the auxiliaries operate under the guidance of the medical societies, they are the volunteer arm of the medical societies. This is definitely the time for volunteers. Perhaps there has never been a time when volunteers were more needed or respected.



Barbara Tippins, (Mrs. William C., Jr)
President-Elect, A-MAG
DeKalb Auxiliary

“The Auxiliary is ours. Let us see that it is filled with caring, concerned, and committed members who are dedicated to fulfilling the health care needs of our communities and to fulfilling the needs and interests of the medical profession.”

Auxilians have experience in planning and managing programs, and they have inside contacts within the communities, neighborhoods, and other civic organizations.

On the other hand, the medical societies carry weight. We derive our very name from them; the members have a recognized standing in the community; people believe in what the societies say and respect their endeavors. Auxiliaries and medical societies working together on projects form a winning combination.

Service to others is not the only role of the auxiliaries. Providing support groups for their own members is as vital as any other program they undertake. Members caught in the throes of problems need understanding and support, especially if these problems arise out of a medical marriage; impairment of the spouse and/or family; or from involvement in a professional liability suit. Sometimes only a person who has been there can completely understand all the ramifications and personal trauma involved. Knowing that they are not alone with their difficulties, that others have faced similar crises and come through them, gives encouragement to the ones involved in a current dilemma. The Auxiliary must be there for them.

The what's-in-it-for-me answer was stated in part if not wholly, in a speech given by former AMA Auxiliary President, Billie Brady (Mrs. Wayne C.), in Chicago when she addressed the 1985 AMA Auxiliary's House of Delegates. She stated, “Let me leave these thoughts with you. I am your organization. Make of me what you will. I shall reflect you clearly as a mirror. If outwardly my appearance is pleasing and inviting, it is because you have made me so. If within my atmosphere is kindly, earnest, friendly, sincere, sympathetic, strong, it is but the manifestation of the spirit of those who constitute my membership. But if you should, by chance, find me a bit cold and dull, I beg of you not to condemn me, for I show forth only the kind of life I shall receive from you. Of this, may you always be assured, I shall respond instantly to your every wish practically expressed, for I am the reflected image of your own soul. Make of me what you will.

“The Auxiliary is ours. Let us see that it is filled with caring, concerned, and committed members who are dedicated to fulfilling the health care needs of the people of our communities, as well as fulfilling the needs and interests of the medical profession.”

What does *your* medical auxiliary do? How do *you* answer this question? ■

Physicians and Auxilians Networking

In a technological-communications controlled society, medicine, like all people-related professions, is confronted with evaluating and often re-directing practices which have been both effective and efficient in a society with different requirements.

Readiness for Change

Historically, the medical profession has been prepared for change. The dramatic changes required in the last 2 decades, however, affecting medical practice and ethics, have caused frustrations in both the home and the work place.

The senior physician and spouse found themselves not having the respected role previously held in leadership and responsibility. As a matter of fact, in a youth-oriented society, the expertise of the senior member on the staff has often been ignored. At the same time, the socio-cultural knowledge concerning the values, needs, and mores of the community, acquired through many years of experience by the spouse, has been viewed as irrelevant to the group.

Public Concern

As a result of the socio-cultural changes within society, combined with the breakdown of communication within the medical community, fears as to the quality of medicine have become widespread within the country. Physicians and their spouses seem clearly to have become more removed from the mainstream of community life. The public no longer feels the close sense of "brotherhood" with the physician and his family. The development of the highly differentiated specialties has added to this lack of identity with the physician. A feeling of further separation and lack of concern has been perceived by the public as the previous close personal contact was lost, thus creating an environment suggestive of mistrust and lawsuits.

Shared Decision Making

The problems in society and the medical community have, during the 1980s, provided an opportunity for teamwork and shared decision making. Physicians and spouses have teamed together to collectively evaluate and formulate a prescription to improve the delivery of health services and therefore the health practices in the nation.

Role Differentiation

The Medical Association of Georgia and Auxiliary leaders have joined talents, diverse yet with a common purpose, to put in motion a plan of action. The one message going out in the 80s, has been that of recognizing needs, analyzing resources needed to meet those needs, and using individual talents toward the common goal.

The decision was made early that leadership responsibilities would be given to the person or group best equipped to resolve the problem. Auxilians and physicians were to be



Pearline Thomas (Mrs. Charles B.) Second Vice President, A-MAG; and Past President, Crawford W. Long Auxiliary, Athens.

partners in a vital industry — delivery of health services for the entire state and nation.

Leadership for Excellence

As Medical Societies and Auxiliaries have become involved in forming a network to recognize and solve problems, many benefits have been derived by members of the medical community as well as others in the general public. Joint committees have worked on such problems as Teenage Pregnancy, Alcohol and Drug Abuse, Child Abuse, Drunk Driving, Aging, Spouse Relationships, Parent-Child Relationships, and General Communication with the Public. *Prevention* of health problems is a key word in health projects, including the current joint Teen Health Assessment Project.

The solution to each of these problems has and continues to require an enormous amount of time. Working together, physicians and spouses have made a significant contribution in each of the areas. For example, The Buckle Up Program resulted in a bill requiring infant car seats for all children under the age of four and has resulted in fewer car-related infant deaths.

The Drug Abuse programs sponsored by the medical societies and auxiliaries throughout the state continue to assist others in working toward reducing the drug problems of society.

In networking with other organizations to seek solutions to these and all medically related problems, as well as non-medically related problems, medical families have again communicated to the public that they are indeed positive examples of concern in all community efforts.

Committees working with the aforementioned, as well as other groups, continue to work as a team in providing quality health care for all our citizens.

Professional Dialogue

In our mobile, complex society, one often has little spontaneous time for interaction with others. This affects interaction, and therefore respect and understanding among specialties in the medical communities. This lack of understanding and appreciation has directly contributed to malpractice suits and to mistrust within the medical communities.

In reviewing some of the obstacles confronting the practice of medicine, one physician observed, "in general, the practicing physician functions in a context where the beliefs and expectations are those of a professional, but where the realities tend to constrain, likening actual practice more to a trade." In considering evaluations such as this, many Medical Societies and Auxiliaries are attempting to enhance the professional behavior of physicians and spouses. This is being done in various ways, through Medical Educational Seminars, Study Committees, Personal Growth Seminars, etc. The purpose of such seminars is to promote better understanding and therefore support groups for physicians and their spouses.

At last, the real challenge to improve the quality of life has new direction. The diverse skills and knowledge of the entire medical community makes it plausible to predict that the progress made will not only continue but will increase. ■

"In networking with other organizations to seek solutions to these and all medically related problems, medical families have again communicated to the public that they are indeed positive examples of concern in all community efforts."

Opportunity For Debate

“The Reference Committees are exercising an appropriate prerogative when they choose to recommend referral of specific subject matter to a committee. This action is announced well in advance, thus allowing concerned individuals to share with fellow delegates the urgency of their concern.”

CONSIDERABLE DISTRESS has been generated during each of the last three MAG House of Delegates when a Reference Committee has elected to refer specific subject matter to a committee. The following summation represents an attempt to avoid similar difficulties in 1986.

Sturgis identifies six purposes that may be served by referring to a committee. Examples one and two represent options which may well appeal to a Reference Committee.[1] Debating the substantive resolutions, which are the target of the motion to refer, defeats the purpose of the motion to refer.

Obviously, a Reference Committee may err in their decision. Those members of the House of Delegates who disagree must have the opportunity to convince fellow delegates that the material in question should be acted upon in a manner other than assignment to a committee.

The remedy does not require a departure from the ordinary rules of parliamentary procedure. Those who oppose the recommendation of the Reference Committee must adjust the *timing* of their efforts. The rules prohibit attempts to garner support *after* the recommendation to refer has been presented to the House. In that posture, we then must rely on less familiar parliamentary maneuvers such as suspension of the rules, reconsideration, and/or a simple motion to withdraw from committee at a later point. These are the only devices available when a delegate exercises his right to make such a motion (refer to committee) in the course of any debate. Fortunately, the intensions of the Reference Committee are announced the day before the meeting (Reference Committee reports distributed). This should alert those who wish to vigorously oppose the referral of subject matter to a committee. It allows them to seek support for their position outside of the formal session. This type of activity is routinely undertaken by individual delegates and/or groups of delegates in support of or in opposition to a host of proposals.

It is my experience that delegates will frequently agree to vote against a Reference Committee recommendation as a matter of courtesy to their colleagues who seek the opportunity to debate. Those same delegates may well oppose and continue to oppose the substance of the motion, yet they are more than willing to be sure that other delegates have at least some opportunity for debate.

In summary, the Reference Committees are exercising an appropriate prerogative when they choose to recommend referral to a committee. This action does not come without warning in the ongoing process of debate. The action is announced well in advance, thus allowing concerned individuals to share with fellow delegates the urgency of their concern. In this fashion, a simple majority is sufficient to insure unlimited debate.

Jack A. Raines, M.D.
Parliamentarian
MAG House of Delegates

1. a) To investigate or study the proposal, make recommendations on it, and return it to the assembly. b) To conserve the time of the assembly by delegating the duty of deciding the proposal, and sometimes of carrying out the decision, to a smaller group.

THE LIABILITY CRISIS IN GEORGIA: A CONCERN TO AUXILIANS

SHERRY WARONKER

MAG and A-MAG, along with the 70-association-member Georgia Liability Crisis Coalition, launched an intense and successful effort aimed at raising the public's awareness of Georgia's liability crisis.

From September, 1985, through March, 1986, "Georgia's Liability Insurance Crisis" received frequent, sometimes daily, attention from the Georgia media. During that same period, MAG and its Auxiliary (A-MAG) spearheaded a campaign emphasizing the need for legislative reform. It is no coincidence that both the media coverage and the legislative campaign occurred simultaneously. MAG and A-MAG, along with the 70-association-member Georgia Liability Crisis Coalition, launched an intense and successful effort aimed at raising the public's awareness of Georgia's liability crisis. After hearing the Coalition's message, people from all walks of life contacted their legislators and shared their concern about rapidly escalating insurance premiums and Georgia's litigious climate. Now that the 1986 Georgia General Assembly is over, we can take stock of our efforts of the last 8 months and be proud of the accomplishments we achieved.

Background to the Liability Crisis

For the past few years, physicians in Georgia have been subject to skyrocketing liability insurance premiums. These premiums more than doubled for most physicians in the last 3 years — tripled for some specialties. Even more revealing, about one in five physicians nationwide was involved in a medical liability claim last year. In Georgia, nearly 40 percent of the physicians responding to a recent survey said they had been named in a professional liability lawsuit. In 1985, the Medical Association of Georgia felt is was time to take drastic measures to restore stability to the medical climate in the state.

Armed with the realization that doctors alone could not solve the liability problem, MAG began to seek other interested parties who were subject to liability problems similar to those of doctors. Surprisingly, almost 70 businesses and trade associations representing thousands of Georgia leaders heeded MAG's call. It was revealed that the "liability crisis" not only affected doctors but also many others in Georgia. School systems, city and county governments, day-care centers, accounting firms, large and small businesses, and even attorneys were subject to rapidly increasing, often unaffordable or unattainable, insurance premiums.

What was the source of this liability insurance crisis? Primarily an explosion of litigation, statewide and nationwide. State court filings had reached an unprecendented level of 12 million, or one lawsuit for every 13 adults. Unsubstantiated lawsuits, exorbitant costs, long delays, and unprecendented results were other factors. The litigation explosion was so harmful to the insurance climate nationwide that the insurance industry lost $4 billion in 1984 — its worst year ever.

Ms. Waronker is Director of Communications at the Medical Association of Georgia.

In August and September of 1985, fulfilling both the MAG Executive Committee and the MAG PR Committees' decisions that liability tort reform be the main focus for the year, MAG and the A-MAG began an all-member fundraising drive to support efforts to curb the liability problem in Georgia. This drive was successful in raising over $170,000 in donations. During these months, a professional liability survey was mailed to all physician members. The purpose of the survey was to measure the effects of the liability climate on the practice of medicine in Georgia. The results, published in the December *Journal,* were shocking.

Contrary to the belief that the current liability climate was only hurting physicians in New York, Florida, and Illinois, the survey revealed that more than 80 percent of the respondents in Georgia were cutting back on medical services or ordering additional diagnostic tests because of their fear of lawsuits. A total of 75 percent of the respondents said the growing liability problem, including drastically higher medical liability insurance premiums, had been a major cause of increases in medical costs for their patients over the last 3 years. Perhaps the most startling finding, however, was that 35 percent of the respondents who provided obstetrical care had stopped delivering babies due to the liability problem. These and other survey results were published in media all over Georgia and picked up by all three national press wire services — Associated Press (AP), United Press International (UPI), and Reuters.



Over 2,000 physicians, auxilians, and others assembled at the Washington Street entrance to the Capitol on Tuesday, February 4, to show their concern about Georgia's liability crisis.



The media, both state and national, showed immense interest in the liability issue. MAG Past President William W. Moore, Jr., is shown here being interviewed by an Atlanta television reporter.

MAG and A-MAG Take Action

Between October and December, MAG and A-MAG began the task of organizing and publicizing the February Leadership Conference and the Capitol Mass Visitation. Every outlet was used — all-member mailings, the MAG *Journal*, the MAG *Newsletter,* and perhaps the most powerful outlet — word-of-mouth. The effort was worthwhile, however, as this year's Leadership Conference had record attendance and maximum interest.

There were also various materials produced throughout the campaign. At the request of the MAG Executive Committee and the Auxiliary to MAG, the PR Committee and staff produced liability patient brochures entitled, "There's a Flood of Lawsuits Threatening Your Health Care," and blue and white buttons which read, "Support Civil Justice Reform 1986." With assistance from MAG Mutual, the PR Committee also developed and distributed general liability kits and speakers' kits which contained fact sheets, backgrounders, an insurance industry overview, our package of

“Armed with the realization that doctors alone could not solve the liability problem, MAG began to seek other interested parties who were subject to liability problems similar to those of doctors. A-MAG assisted in this endeavor.”

legislative proposals, a packet of newspaper articles on the liability crisis statewide and nationwide, and sample response letters and letters to the editor. A liability slide show and script were also developed for use by physicians, auxilians, MAG staff, and Coalition members in the various speaking engagements to civic and medical audiences throughout the state.

Between November 1985 and February 1986, over 100 speaking presentations were made. The audiences ranged from medical societies, auxiliaries, and hospitals, to Rotary, Kiwanas, and Lions Clubs. There were also selected presentations to Georgia mayors and political parties. The Club meetings were set up primarily by MAG physicians and auxilians concerned about getting the word of the liability crisis to the Georgia public. Many of the speaking engagements were attended by local press and received excellent coverage and placement in local papers.

The MAG PR Committee and staff with the help of the public relations firm of Manning, Selvage and Lee, obtained maximum press coverage of the campaign, statewide, from December through February. We received hundreds of newspaper articles and televison and radio clips from our clipping service — most of which were generated by our campaign activities. The liability issue also received national attention. National publications such as *U.S. News and World Report*, the *Wall Street Journal, Newsweek, U.S.A. Today* and the *New York Times* focused attention on the Liability/Insurance Crisis.

The broadcast media also showed immense interest in the liability issue. The official formation of the Georgia Liability Crisis Coalition and the resulting announcement at a December 18, 1985, press conference at the Capitol, generated much coverage by the broadcast media. The press conference also prompted various debate forums and talk shows on radio and television. This same interest by the broadcast media was revealed at MAG's February 4 “Mass Visit to the State Capitol.”

In early January, following approval by MAG and the Georgia Liability Crisis Coalition, a package of tort reform legislation was drafted and numbered — House bills 1184, 1185, and 1186. Bill 1184 proposed regulation of attorney contingency fees. Bill 1185 proposed reform of the dismiss and refile rule for court cases, and 1186 contained all other proposals, namely disclosure of collateral sources of payment, structured settlements, cap on non-economic losses and punitive damages, judicial authority to modify awards, and reform of joint and several liability.

These bills were sponsored by State Representative Pete Robinson of Columbus and initially introduced into the House Judiciary Committee where the bills received the first of many rewrites. MAG also introduced one bill on its own calling for mandatory review of a physician by the Composite State Board of Medical Examiners in substantiated lawsuits with awards or settlements exceeding $100,000.

The 1986 MAG Leadership Conference

The culmination of all MAG and A-MAG tort reform efforts occurred at the 1986 Leadership Conference February 2-4 at the Hyatt Regency in Atlanta. Over 600 physicians and their spouses attended the conference which featured an entire day of legislative activities. Monday, February 3, was devoted entirely to the Liability Insurance Crisis. The day began with a welcome from MAG's president, William D. Logan, Jr., M.D., and an introduction from Rusty Kidd, MAG's Director of Legislative Activities. Other speakers throughout the day included Georgia's Insurance Commissioner, The Honorable Warren Evans; the President of Cotton States Insurance Companies, Mr. Robert Carpenter; the Assistant Deputy Insurance Commissioner, Mr. Dan Champlin; Mr. Donald Fraser, Jr., Director of Legislative Activities for the Florida Medical Association; James Kaufmann, M.D., MAG's Legislative Chairman; and Charles D. Hollis, Jr.,



Mrs. Joe Frank Harris, first lady of Georgia, was the featured guest and recipient of a plaque at the Auxiliary luncheon on Monday, February 3. Mrs. William Collins (left), A-MAG's Legislative Activities Chairman, and Mrs. Dent W. Purcell, President of the A-MAG, are also pictured. The plaque given to Mrs. Harris was in appreciation for her support of health care issues in Georgia.

M.D., President of MAG Mutual Insurance Company.

Also on Monday was an Auxiliary luncheon and fashion show at which Mrs. Joe Frank Harris, first lady of Georgia, was the featured guest. Over 150 auxilians attended the affair and watched as Mrs. Dent (Ann) Purcell, A-MAG President, presented Mrs. Harris with a plaque of appreciation from the membership. In her address to the Auxiliary, Mrs. Harris said that she and the Governor were sympathetic to MAG's tort reform efforts, and she pledged their continued support.

On Monday evening, a reception for physicians, auxilians and their legislators brought over 500 attendees to the Hyatt. Following the reception, a great number of physicians and their spouses dined with their legislators in an effort to build or strengthen individual legislator-constituent relationships.

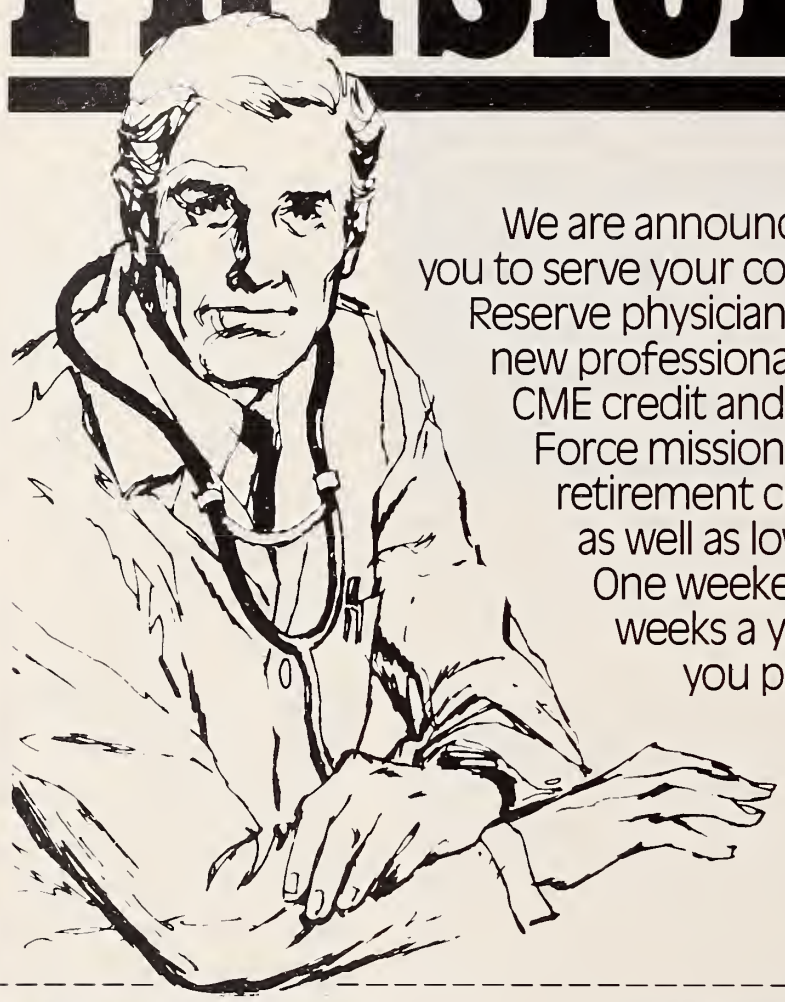
The Capitol Mass Visitation

On Tuesday, February 4, the largest, full-scale attempt by Georgia physicians to show their concern over the liability crisis to the legislators took place on the steps of the State Capitol. Over 2,000 physicians, auxilians, office staff, and MAG staff assembled at the Washington Street entrance to the Capitol. Listening to messages from William D. Logan, Jr., M.D., MAG's president; Lt. Governor Zell Miller, Martin H. Smith, M.D.; Sam O. Atkins, M.D.; and Robert E. Wells, M.D. the medical audience applauded the work of the legislature and shared their fears and concerns over the adverse effects of the liability crisis. The Capitol visit received state and national media coverage and let it be known that physicians were willing to give time away from their practices in an attempt to impact and improve the climate in which medical care is delivered in Georgia.

MAG physicians and Auxilians demonstrated to the public and our elected representatives that they were determined to help Georgians achieve relief from the critical problems of the liability crisis. ■

"A professional liability survey was mailed to all physician members of the MAG to measure the effects of the liability climate on the practice of medicine in Georgia. The results were shocking."

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References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

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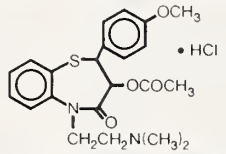
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1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CAROIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CAROIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CAROIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CAROIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CAROIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Oermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LOH, and CPK. However, a definitive cause and effect between these events and CAROIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CAROIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral/LO_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CAROIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NOC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NOC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NOC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NOC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

Issued 4/1/84

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SEX AND YOUNG PEOPLE: LEAVING THEM ALONE TO COPE IS NOT THE ANSWER

MARION HOWARD, M.D.

The "Postponing Sexual Involvement" Series is central to this endeavor.

"I learned you don't have to have sex if you don't want to."

"I learned that you could still love someone and have a relationship without having sex."

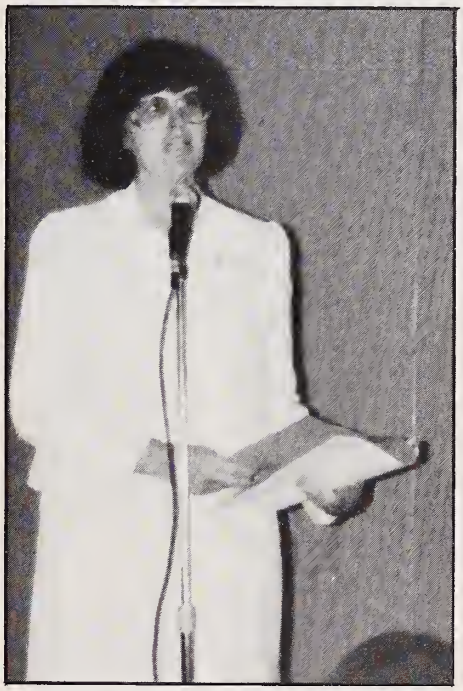
"I learned that I don't have to have sex to feel grown up."

"I've always believed in respecting a girl's feelings but not well enough. You've made it possible for me to understand better. Thank you."

"I learned that sex doesn't prove anything."

"I learned how to say no."

THESE STUDENT REACTIONS to being given information on postponing sexual involvement point up the special needs of a generation of young people growing up in a sexually provocative world. The reactions also point up the fact that, left on their own to cope with such a world, young people are likely to engage in sex early and for the wrong reasons.



Dr. Marion Howard spoke on the special sexual problems encountered by teens at the Auxiliary Summer Board meeting in Macon.

Currently, young people are bombarded by sexual stimuli — rock stars whose songs and videos are sexually explicit, advertisers who use sex to sell their products, movie and TV shows which exploit sex as entertainment — all of which give young people the impression that they should be having sex. Most of the sexual relationships young people see in the media are among unmarried people (94%) and among the younger generations. Sex also is often portrayed as manipulative, exploitive, and without commitment or consequences. That what they see affects teenagers' views of reality is shown by studies such as those that indicate teens who watch "soap-opera" style shows on TV overestimate the amount of sex among unmarried people and underestimate the amount of sex among married people.

Younger teens, who have limited life experiences and whose stage of cognitive development means that they are less likely to see the implications of their actions on their futures, are particularly vulnerable to the influences of the media. Compounding this is the fact that a hundred years ago, girls first begun to menstruate around the age of 17, and this more nearly coincided with the age of marriage and the acquisition of skills that enabled a young couple to function independently. Today, the

Dr. Howard is an Associate Professor of Gyn-Ob at Emory University and is with the Teen Services Program of Grady Memorial Hospital in Atlanta.



(L to R): Dr. Marion Howard, Associate Professor at Emory University, and Ann Purcell (Mrs. Dent W.) at the Auxiliary Summer Board meeting.

average age of beginning fertility for girls in the United States is 12.5 years, for boys 13.5 years of age. Thus, young people now at the very beginning of their teen years are at risk for pregnancy and sexually transmitted diseases if they become sexually involved. And data indicate that more and more young people are becoming sexually involved. Currently, 19.2% of teenagers age 15 have had sexual intercourse!

Pregnancy among young teens is associated with disproportionately large family size, child abuse and neglect, increased suicide rates, incomplete education, underemployment, unemployment, welfare dependency, family dependency, family instability, including initial single parenthood, forced marriages, high divorce rates, increased maternal deaths, infant deaths, premature births, and neurological handicaps, including mental retardation. In the state of Georgia, there are over 5,000 births to teens each year, nearly 1,500 of these to teens who are still of school-age (under the age of 18). Indeed, one out of every eight girls in Georgia gives birth to a baby while still of school age.

Young teens who have sex, however, rarely think of teenage pregnancy as a possible outcome of their behavior. "I didn't think it could happen to me," is not an uncommon reaction among teens. "We didn't do it that often." "I didn't think you could get pregnant the first time," or "if you did it standing up." "I don't know, I didn't mean to have sex, we just got carried away."

Very often, teenagers become sexually involved as a result of peer pressure. "You would if you loved me." "If you won't do it, then I don't want to see you anymore." "If you don't want to have sex with your girlfriend, man, you must be gay." Such pressures are very difficult for young people who want to be popular, to fit in, and to be accepted, to resist. Furthermore, young people are often confused about relationships and have unrealistic notions about the meaning and importance of "romantic love." If one is "in love," sexual relationships seem much more permissible. Younger teens today are less likely to have thought about levels of physically expressing affection and that it is possible to stop several levels above sexual intercourse. This is particularly true as they see more open sexual behavior role modeled in society by slightly older teens and young adults.

"Postponing Sexual Involvement" Series

Young people need information about the consequences of premature sexual involvement as well as information and ideas with respect to resisting social and peer pressures and making mature sexual decisions. They need to be given this information in ways that appeal to them and will have some lasting value in their minds. To meet this need, the Department of Gynecology and Obstetrics at Emory University and the Teen Services Program of Grady Memorial Hospital have developed an educational series on "Postponing Sexual Involvement" (the "how-to-say-no" program) to meet the needs of both male and female youth in this area. The educational series is aimed at 13-15 year olds. There is also a companion series for parents to enable

them to better understand the social and peer pressures their young people are under and work out ways they can be helpful to young people in resisting them.

The Department of Gynecology and Obstetrics at Emory is trying to reach a fifth of the state's population of 13-15 year olds by 1987 with the "Postponing Sexual Involvement" curriculum. By making the curriculum available to large numbers of youths, it is hoped that a climate of support for less pressured sexual decision-making will develop. By giving individual teens concrete skills for understanding and resisting social and peer pressures, it is also hoped that fewer teens will become sexually involved at young ages.

The Auxiliary to the Medical Association of Georgia has been asked to help in this effort to reach out to young teens. To that end, Dr. Marion Howard, Associate Professor of Gyn-Ob at Emory University, spoke to auxilians at Auxiliary Board meetings at St. Simons in 1984 and at Macon in 1985.



(L to R): Barbara Tippins (Mrs. William C.), President-elect of the A-MAG, and Ann Purcell (Mrs. Dent W.), President, are pictured here with materials from the "Postponing Sexual Involvement" Series. The Auxiliary will continue to play a key role in disseminating information about this Series to schools throughout Georgia.

"Young people need information about the consequences of premature sexual involvement as well as information and ideas with respect to resisting social and peer pressures and making mature sexual decisions. To meet this need, an educational series on 'Postponing Sexual Involvement' has been developed."

"We need the help of the Auxiliary and are grateful for their involvement," said Dr. Howard. "Not enough people in Georgia know about the 'Postponing' Curriculum and our attempt to help youth postpone sexual involvement. Last year through special funds, we offered free materials and training in the use of the educational series through the District health departments across the state of Georgia. Although in some cases, community groups and agencies including schools attended those sessions, many school systems have never been approached about the curriculum or given information about how its implementation might benefit youth. We are hopeful the auxiliaries can approach local school systems and acquaint them with the curriculum and urge its adoption."

"We want auxiliary members to use the materials to conduct youth groups themselves," adds Marie Mitchell, R.N., the Program Supervisor of the Teen Services Program and one of the authors of the "Postponing Sexual Involvement Educational Series." "The Series is self-explanatory," Ms. Mitchell indicates. "It comes with slides, tape, and a very detailed leader's guide. When used in a school setting, to do the complete series takes five classroom periods. However, it can be done with church youth groups, Girls clubs, Boys clubs, etc. in four 1½ hour sessions. The first session is on social pressures, the second session is on peer pressures, the third session is on problem solving, and the final session is on using the new skills taught in the series. I personally believe anyone who is comfortable

"The Auxiliary has been asked to approach local school systems and acquaint them with the 'Postponing' series as well as to conduct youth groups themselves."

leading a group and who likes young people could present the educational series and really enjoy doing so.''

Through June 1986, ''Postponing Sexual Involvement'' materials are available to individual auxiliaries at below cost. Simply contact Dr. Howard at Box 26158, Grady Memorial Hospital, 80 Butler St., S.E., Atlanta, GA 30335.

Success and Acceptance of the Series

One test of any curriculum is how teachers respond to its presentation in the classroom. Twenty-eight teachers in whose classrooms ''Postponing Sexual Involvement'' was presented responded to a questionnaire sent out in June, 1985, by the Teen Services Program. Asked whether they thought students needed an educational program designed to help them postpone sexual involvement, all 28 teachers said yes. When asked if they thought the students benefitted from presentation of the ''Postponing Sexual Involvement Series,'' all the teachers responded yes. (One answered ''*very* much so'' and another wrote ''somewhat.'') Perhaps most important, all of the teachers indicated that they thought presentation of the ''Postponing Sexual Involvement Series'' was a good use of classroom time. A number of teachers wrote in extra comments such as:

''Very well presented. The Series was most beneficial to the students. Keep it up. The students learned a lot.''

''Class should be offered 8th through 12th grade.''

''I feel that the series was well done and in good taste.''

''Simply put, the more this program is taught, the better it will get. This program is vital for our youngsters. Any program of this type is well worth implementation for our school system.''

''Should be taught in the 6th grade.''



Ms. Marie Mitchell, Program Supervisor of Teen Services at Grady Memorial Hospital, in her office where she coordinates the activities for the ''Postponing Sexual Involvement'' Series.

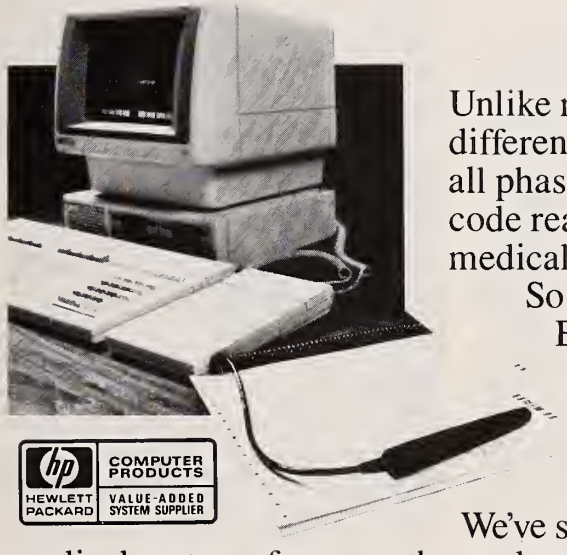
''The [series] is very good, and I do hope it will continue to be a part of the school's curriculum because it is needed.''

Information about the effects of the ''Postponing Sexual Involvement Series'' on youth during the 1984-85 school year was also collected. At the beginning of the last session of the Series, young people were asked to fill out a questionnaire. The data gathered were from 3,528 students.

Over two-thirds of the students indicated that the Series had made them more aware of pressures to become sexually involved. Well over two-thirds indicated what they had learned had helped them say no to the pressures they had experienced since the Series began. Over three-quarters of the students would recommend participation in the Series to their friends. Of great importance was the fact that *72% said what they had learned in the Series would be helpful to them in the future in resisting pressures to become sexually involved.* Students also rated the Series overall as being either extremely helpful, very helpful, somewhat helpful, or not very helpful. Only four percent of the students said the Series was not very helpful. The overwhelming majority of the students (96%) found the Series helpful: 20% found it *somewhat* helpful, 40% found it *very* helpful, and 36% found it *extremely* helpful.

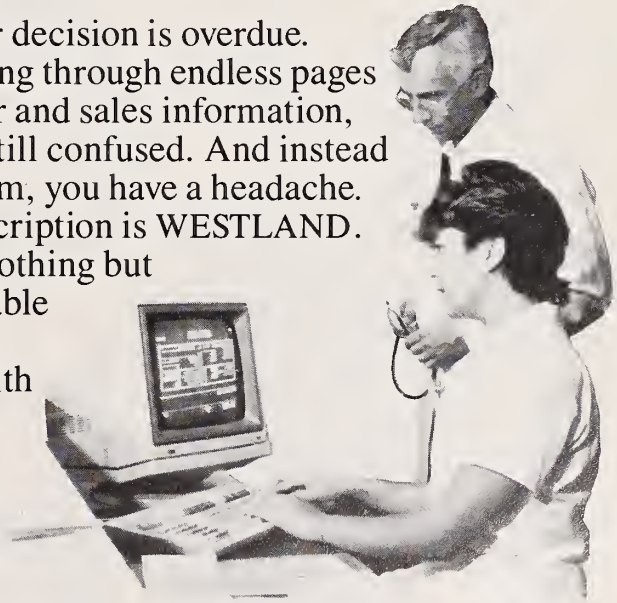
Perhaps one of the most poignant remarks made by a high school student after having been giving information on sexual decision-making and postponing sexual involvement was, ''You were too late for me.'' There are thousands and thousands of young people in Georgia who need this information for whom we are not yet too late. Young people do not grow up in isolation, they grow up in environments. And the environment we are giving them today is one in which sexuality and sexual expression are provocatively open. It is unrealistic to expect young people to be able to cope with the social stimulus and the peer pressure without some adult guidance and support. They need us, and we need them. They are not just our future, they are our present, and the reality of their choices affects us all. Let's not be ''too late'' for any more young people. Get involved. Thank you. ■

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THE GIFT OF LIFE

KATHERINE CLARK (MRS. EUGENE C.)

THE Organ Procurement Committee of the Auxiliary to the Medical Association of Georgia works with the Atlanta Regional Organ Procurement Agency, the Georgia Lion's Eye Bank, and the Kidney Foundation of Georgia to promote organ procurement throughout the state.

Help is needed in public education. The two excuses most frequently given for not donating organs are ignorance of the need, and superstition. The Kidney Foundation of Georgia is eager to assist local auxiliaries by presenting informative programs at monthly meetings and/or supplying educational brochures aimed at educating the public.

Ed Bradshaw, Organ Procurement Coordinator of Southwest Georgia, presented a program on organ procurement at summer boards. Such programs are available to local auxiliaries on request.

Posters and brochures on kidney donation and uniform donor cards, which are legal documents under the Uniform Anatomical Gift Act, are available for distribution in local hospitals, doctor's offices, highway patrol offices, and driver's education classes in local high schools.

Organ procurement chairmen for each Auxiliary are responsible for distribution of this material and should work with their local highway patrol office to be sure that someone asks each license recipient to indicate their intent on the back of their driver's license. The donor card is printed on the back of each driver's license and can be signed at anytime. ■



Katherine Clark



Ed Bradshaw, Organ Procurement Coordinator of Southwest Georgia, spoke at the Auxiliary Summer Boards. (The teddy bear with the "Caring, Sharing, and Learning" signs is present once again, representing the 1985-86 Auxiliary theme.)



Ginger Leach, President of the Auxiliary to the Dougherty County Medical Society, is pictured above right, presenting a brochure to Louis Sheffield, a dialysis patient who is holding a poster distributed by the Auxiliary. Also pictured (left to right) are Portia Wooden, head dialysis nurse, Katherine Clark, organ procurement chairman for A-MAG, and Sharon Hutcheson, administrator for Dialysis Clinics, Inc. Posters, brochures, key chains, and pens are available on request for distribution. For further information, call Katherine Clark at 1-800-342-5927.

Mrs. Clark is a member of the Dougherty County Auxiliary and is A-MAG's Organ Procurement Chairman.

AMA-ERF

DONNA CARPENTER (MRS. H. DEITZ, JR.)

Last year Georgia contributed over $24,000 to the American Medical Association Education and Research Foundation



Mrs. Donna Carpenter reporting on AMA-ERF achievements at the Auxiliary Summer Boards.



Looking over the AMA-ERF auction items at the Winter Boards are (left to right) Diane Laws (Glynn County), Lisa Vickery (Walton County), and Linda Flournoy (Glynn County).

THE AMA Education and Research Foundation was enriched by over 2 million dollars in national contributions in 1984.

On a state level, AMA-ERF projects included the state board holiday sharing card, and "I Love My Doctor" T-shirts and sweatshirts that sold for $10 and $17, respectively. A beautiful Alexis Kirk belt was raffled at the Summer Boards, resulting in a $395 profit. A large quilted wall hanging, embroidered with the name of all participating counties, will be presented to the Medical Association of Georgia in April, 1986.

County chairmen are being urged to sell gift wrap, hold auctions, sell T-shirts, utilize the sharing card, and sponsor a tour of homes. We are also asking that Auxilians designate the medical school of their choice rather than have the contribution divided among the 127 schools around the nation.

Last year Georgia contributed over $24,000 to AMA-ERF. Physicians may consider making contributions to the medical school of their choice through their county AMA-ERF chairman or the state chairman if their county does not have a chairman. Our goals this year are to have a significant increase in county participation and total contributions for this worthwhile project.

Mrs. Carpenter is the AMA-ERF State Chairman and treasurer of the Bibb County Medical Auxiliary. She has also served the A-MAG as Recording Secretary.

WE CARE, WE SHARE, AND WE LEARN

MRS. GRACE WALDEN (CHARLES W.)

An overview of county auxiliary activities throughout the state.



As part of a HIP, a screening program for elementary students in Muscogee County, Mrs. Nancy Wolff, an auxilian, measures the amount of body fat in the triceps area of a student. The observer is looking somewhat askance at the whole procedure!



Sheriff Ray Wilkes of Bibb County is shown here having his blood pressure taken by Karen Evans, a nurse and member of the Bibb County Auxiliary, at the Health Fair sponsored by the Auxiliary.

FROM THE MOUNTAINS in North Georgia to the Okefenokee Swamp in South Georgia, from Walker-Catoosa-Dade and the Chattahooche River on the West to the Atlantic Ocean on the East, Auxilians across the State of Georgia have been involved in numerous health projects for the betterment of their communities.

The IT'S OK TO TELL puppet show has been presented numerous times by the *Glynn County Auxiliary*, the *Richmond County Auxiliary* (SOMEONE TO TALK TO), and the *Whitfield-Murray County Auxiliary*. Others, such as the *Muscogee County Auxiliary* have continued its child abuse prevention project through the distribution of activity books to kindergartens. In *Walker-Catoosa-Dade Counties*, Auxilians have distributed 500 IT'S OK TO TELL coloring books to elementary students in the North Georgia area and also sponsored spot radio announcements on child abuse prevention at a local station for several months.

"Substance abuse, child abuse, and increasing awareness of physical fitness are some of the issues which county auxilliaries addressed in 1985-86 throughout the State of Georgia."

The Health Improvement Program — HIP — was introduced into the *Muscogee County* school system by the *Medical Auxiliary*, where Auxilians screened students in the fourth, fifth, and sixth grades in 10 schools

Mrs. Walden is President-Elect of the Dekalb County Medical Auxiliary.

on height, weight, blood pressure, pulse, and amount of triceps fatty tissue. Aiming for improved physical fitness as well as improvement through nutrition classes, each student also received a book on substance abuse.

Prevention of substance abuse has been a primary focus of the *Auxiliary to the Medical Association of Georgia* this year, with emphasis being placed on the bookcovers available for distribution through the county auxiliaries. The widespread distribution of these bookcovers to school children in Georgia has been most successful — approximately 8700 distributed to date. *Georgia Medical, Glynn County, Tift County,* and *Walker-Catoosa-Dade Auxiliaries* have participated in this program, to name a few.

The Medifile Cards have been extremely popular, and some 22,600 cards have been distributed by Auxilians and through physicians' offices at health fairs and at senior citizens' homes. *Tift, Walker-Catoosa-Dade, Muscogee, and Whitfield-Murray* county Auxiliaries all distributed these cards through various projects, and Whitfield-Murray centered the distribution around spot announcements on the local TV station.

" Some 22,600 Medifile Cards have been distributed by Auxilians in several counties. "

After hearing Dr. Marion Howard speak at the State Summer Board Meeting on "Postponing Sexual Involvement," several auxiliaries (examples: *Whitfield-Murray, Tift,* and *Georgia Medical*) have invited her to speak to their groups and have purchased the kits to be shown to the local schools.

There have been numerous other health projects in Auxiliaries throughout the State which merit attention. The *Bibb County Auxiliary* conducted its third annual health fair for the County Sheriffs Department, at which time 160 people were screened for blood pressure, height and weight, CBC, and chemistry profiles for kidney, heart, and liver. *The Medical Association of Atlanta Auxiliary* purchased display stands for drivers' license bureaus so that organ procurement information could be available to the general public; the Auxiliary's name was on each stand. The *Whitfield-Murray Auxiliary* sponsored colorectal screening at a local health fair. *The Richmond County Medical Auxiliary* — in conjunction with the Medical Society — sponsored a community-wide anti-smoking campaign; their campaign — consisting of a slide presentation and a discussion of advertising and the effects of peer pressure in decision-making — was presented to over 1,000 eighth grade students.

All of these projects are but *some* of the hundreds of ways Auxilians across this state have been involved in 1985-86 in "Caring, Sharing, Learning." There is no way these projects could have successful conclusions without the support of so many Auxiliary volunteers who truly *care* and *share* while *learning.* ■



Mrs. Sharon Adams (standing), president of the Muscogee County Auxiliary, reviews Medifile Cards with senior citizens at a local recreation center.

" One county medical society sponsored a community-wide anti-smoking campaign. "

Auxiliary to the Medical Association of Georgia 61st Annual Meeting

April 24-26, 1986
Callaway Gardens
Pine Mountain, Georgia



Mrs. Dent W. Purcell (Ann)
President, A-MAG



Mrs. William R. McWhirter (Ann)
Convention Co-Chairman



Mrs. William A. Wolff (Nancy)
Convention Co-Chairman

President's Invitation

The Auxiliary to the Medical Association of Georgia cordially invites you to the 61st Annual Convention in Callaway Gardens, Pine Mountain, Georgia. It will be a time of fun and fellowship; renewing old friendships and making new ones; a time of learning and sharing your accomplishments of the past year.

Many activities, business as well as social, have been planned for you. Please join us for what promises to be a good time for all.

Welcome to Callaway Gardens!

The Auxiliary to the Muscogee County Medical Society (Columbus) is proud to host this year's state convention at beautiful Callaway Gardens — a vacationer's delight. Luxurious accommodations, fine restaurants, sports activities, hiking trails, and miles of scenic beauty are available for your enjoyment.

Our Auxiliary is here to make your stay at Callaway Gardens a most pleasurable one. If we can assist you in any way, please let us know.

AUXILIARY PROGRAM

THURSDAY, APRIL 24, 1986

3:00 to 5:00 p.m. — Registration and Information

7:00 — MAG General Session
(All MAG and Auxiliary Members and Guests invited)
Presiding: William Logan, Jr., M.D., President
Opening Ceremonies
Report of the President of the Auxiliary to the Medical Association of Georgia: Mrs. Dent W. Purcell, Savannah.
AMA-ERF Check Presentation

FRIDAY, APRIL 25, 1986

8 a.m. to 5:00 — Registration and Information
Hospitality and Exhibits

10:00 a.m. — PRE-CONVENTION EXECUTIVE BOARD MEETING
Presiding: Mrs. Dent W. Purcell, President
Business Meeting

12 noon — AUXILIARY LUNCHEON
(All delegates, board members, Auxilians, and guests)
Presiding: Mrs. Purcell
Speaker: Lt. Governor Zell Miller

2:00 p.m. — HOUSE OF DELEGATES: FIRST GENERAL SESSION
Presiding: Mrs. Purcell
Spotlighting County Presidents, 1985-86
Opening Ceremonies
President's Greetings
Welcome: Mrs. William R. McWhirter, Columbus, Convention Co-Chairman
Introduction of Head Table: Mrs. Purcell
Introduction of Past Presidents and Special Guests
Greetings from the MAG: William D. Logan, Jr., M.D., President
Introduction for Address
Address: Mrs. Mylie E. Durham, Jr., President-Elect, Auxiliary to AMA
Greetings from Auxiliary to Southern Medical Association: Mrs. Frank E. Morgan, President
Business Meeting
Introduction of Pages
Credentials Report
Convention Standing Rules
Adoption of Program
Roll Call
Minutes
Officers' Reports
Committee Reports
Unfinished Business
New Business
Announcements
Recess of Meeting

6:30 to 8:30 p.m. — A-MAG PRESIDENT'S ENTERTAINMENT
(All Auxilians, MAG Committee on the Auxiliary, Guests)

SATURDAY, APRIL 26, 1986

8 a.m. to 12:00 — Registration and Information
Hospitality and Exhibits

8:30 a.m. — HOUSE OF DELEGATES: SECOND GENERAL SESSION
Presiding: Mrs. Purcell
Introduction of Guests
Introduction of Past Presidents
Memorial Service
New Business Con't:
Revised Report of Credentials Committee
Election of 1986-87 Nominating Committee
Election of 1986 Auxiliary — MAG Delegates for National Convention
Report of Awards — SMA Auxiliary Doctors' Day 1984-1985
Report of A-MAG Awards Committee
Report of 1985-1986 Nominating Committee
Election of Officers
Installation of Officers
Presentation of 1986-87 President's Pin and Gavel
Inaugural Address and Announcements of 1986-1987 chairmenships
Presentation of Past President's Pin
Announcements
Adjournment

12:30 — LUNCHEON: Auxiliary Members and Guests
POST CONVENTION EXECUTIVE BOARD MEETING
PAST PRESIDENT'S LUNCHEON

Evening — MAG RECEPTION (MAG Members and Spouses)

A-MAG
STATE OFFICERS 1985-1986

PRESIDENT..... MRS. DENT W. PURCELL (Ann)
P.O. Box 7706, Garden City 31418
(Georgia Medical) (912)236-6717

PRESIDENT-ELECT.....MRS. WILLIAM C. TIPPINS, JR. (Barbara)
1772 Tamworth Court, Dunwoody 30338
(DeKalb) (404)394-2437

FIRST VICE PRESIDENT.....
MRS. JACOB R. HARRISON, JR. (Nancy)
504 Rainsong Road, Dalton 30720
(Whitfield-Murray) (404)226-3719 (H) 226-6542 (W)

SECOND VICE PRESIDENT
MRS. CHARLES B. THOMAS (Pearline)
1130 Tanglebrook Dr., Athens 30606
(Crawford W. Long) (404)549-1629 (H) 542-4110 (W)

THIRD VICE-PRESIDENT MRS. WILLIAM C. COLLINS (Jan)
600 Winterthur Dr., N.W. Atlanta 30328
(Medical Assoc. of Atlanta) (404)955-1759

AREA VICE PRESIDENTS

NORTHEAST.....MRS. ROBERT T. ANDERSON (Joan)
5 Etowah Terrace, Canton 30114
(Cherokee-Pickens) (404)479-9025

NORTHWEST MRS. ROY W. VANDIVER (Maureen)
5656 Bahia Mar Circle, Stone Mountain 30087
(DeKalb) (404)938-4551

SOUTHEAST MRS. TALLY EDDINGS (Kathy)
2206 Darling Avenue, Waycross 31501
(Ware) (912)283-1664

SOUTHWEST MRS. THOMAS A. WADE, JR. (Sherry)
7000 Mulford Court, Columbus 31904
(Muscogee) (404)324-0597

SECRETARY..... MRS. JOHN H. DORMINY, III (Alice)
2202 Emory Drive, Tifton 31794
(Tift) (912)386-8394

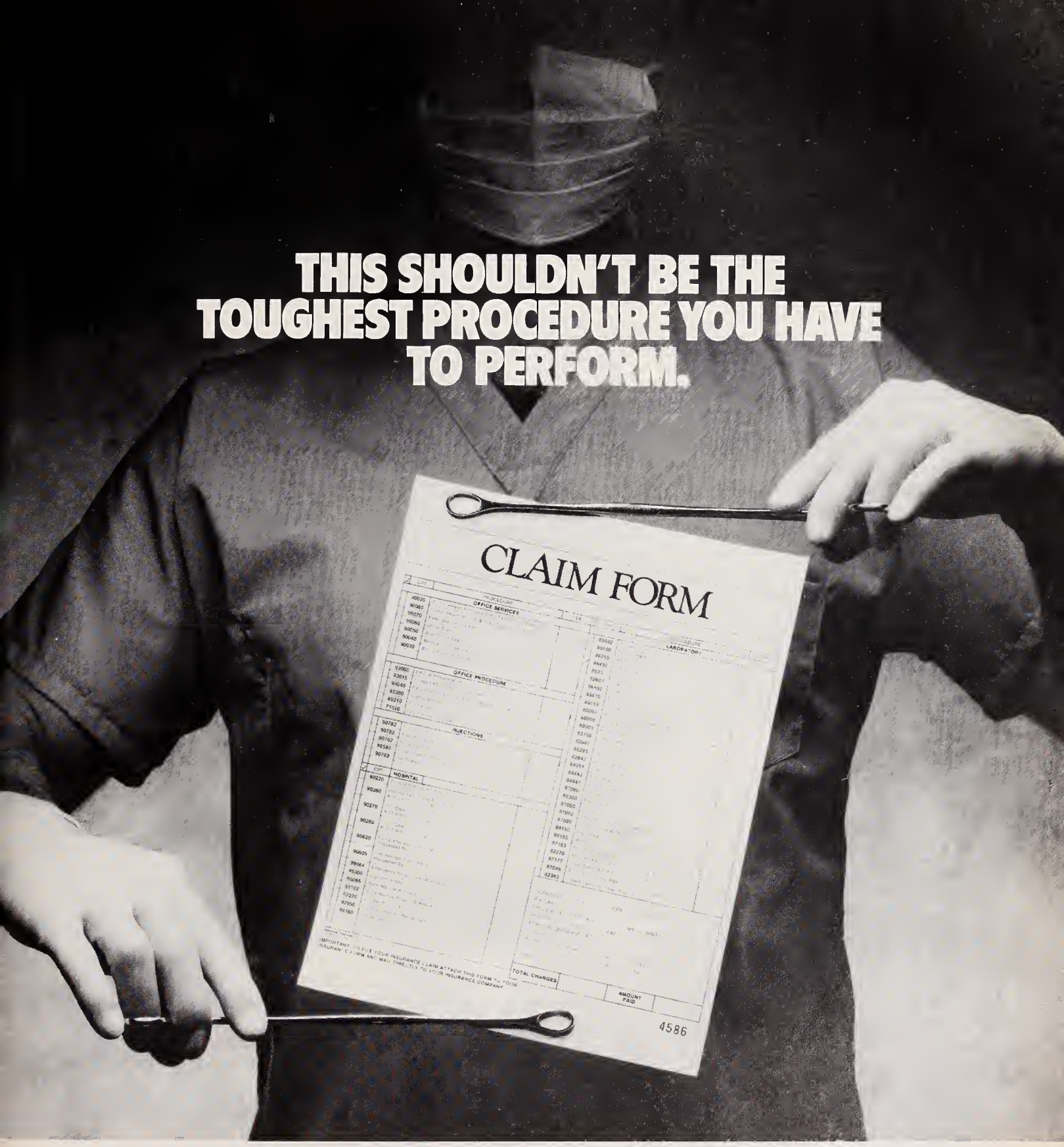
TREASURER MRS. LAWRENCE J. FREANT (Sarah)
2646 Stanislaus Circle, Macon 31204
(Bibb) (91)742-5488 (H); 742-6264 (W)

HISTORIAN MRS. MARK BROWN (Julie)
809 Windsor Court, Augusta 30909
(Richmond) (404)736-0219

PARLIAMENTARIAN MRS. EMMERICH S. von HAAM, JR. (Julie)
3888 Fairfax Court, N.W., Atlanta 30339
(Medical Assoc. of Atlanta) (404)435-4635

Rules To Govern The Convention

1. The voting body of the convention shall consist of the members of the Executive Board of the Auxiliary to the MAG and the duly accredited delegates from the county auxiliaries. No one is entitled to vote until registered.
2. To gain recognition, a delegate is requested to rise, address the chair, give her name and the name of her auxiliary.
3. No delegate shall speak more than twice on the same subject, and is limited to 2 minutes each time.
4. Badges must be worn by members of the voting body during all general meetings of the convention.
5. Delegates' privileges are not transferable.
6. All motions shall be presented in writing to the Secretary. They shall be signed by persons making the motion.
7. All persons appearing on the program must be seated near the platform when the meeting opens.



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THE MEDICAL ASSOCIATION OF GEORGIA'S 1986 HOUSE OF DELEGATES

CALLAWAY GARDENS APRIL 24-26

NEXT month, the 132nd annual meeting of the Medical Association of Georgia House of Delegates, our policy-making body, will be held at Callaway Gardens Inn at Pine Mountain, Georgia.

Reservations For Lodging

Guest rooms at the Callaway Gardens Inn, plus villas and cottages, are available for participants in our House meeting. All MAG delegates and officers have received reservation cards from MAG Headquarters. All others must make reservations directly with Callaway Gardens. Our contact person in the reservations office is Marion Dunn: 800/282-8181.

Registration

Registration facilities will be maintained for delegates, alternate delegates, directors, and all members. The registration schedule will be as follows:

Thursday, April 24....4:00 p.m.-8:00 p.m.
Friday, April 25.....7:30 a.m.-3:00 p.m.
Saturday, April 26 8:30 a.m.-4:00 p.m.

The Auxiliary to the MAG will hold its 61st Annual Meeting at Callaway Gardens, April 25-26. Please refer to pages 166-167 for program information.

General Session

The opening General Session will be called to order by MAG's President, William D. Logan, Jr., M.D., on Thursday, April 24, at 7:00 p.m. in the Peach and Willow Rooms. Featured at this opening ceremony will be the presentation of awards by Dr. Logan, and the report of the President of the Auxiliary to MAG, Mrs. Dent W. Purcell.

First Session of The House

After these ceremonies, Jack F. Menendez, M.D., Speaker, will convene the House of Delegates at 8:00 p.m. in the Peach and Willow Rooms. Nominations for MAG officers will be made, and reports of officers and committees will be presented. Resolutions and other new business will be placed before the House. Reference Committees will be appointed, and all resolutions and reports as required will be referred by the Speaker to the appropriate Reference Committees.

GaMPAC Breakfast

GaMPAC will sponsor a breakfast on Friday morning, April 25, at 7:30 a.m. in Peach-Willow.

Reference Committees

According to the Bylaws of the Association, all resolutions and reports which contain recommendations must be referred to a Reference Committee for open hearing. All members are invited and encouraged to appear before the Reference Committees to express their views. The Committees will open their hearings on Friday, April 25, at 9:00 a.m.

Second Session: Keynote Speaker, Election of Officers

The Second Session of the House of Delegates will convene at 9:00 a.m. on Saturday, April 26, in the Peach and Willow Rooms. Reference Committees will report to the House at this time.

MAG President William D. Logan, Jr., M.D., and MAG President-Elect John D. Watson, Jr., M.D., will address the group to open the Session. Also, Harrison L. (Jack) Rogers, Jr., M.D., President of the AMA, will deliver the keynote address before lunch.

Long active in the Medical Association of Georgia, Dr. Rogers has served as Vice Speaker and Speaker of the House of Delegates, as a member of the Board, and chairman of several committees. In June, 1981, Dr. Rogers received the MAG's Distinguished Service Award. He has also served as President of the Medical Association of Atlanta. He was elected Speaker of the AMA House of Delegates in 1981, and prior to that, served as Vice Speaker. Taking office as President of the AMA in June 1985, Dr. Rogers has distinguished himself in his leadership of the medical profession. We are fortunate to have him join us as Keynote Speaker for our House of Delegates.

Election of officers nominated on Thursday evening will take place during the Saturday morning session. The tellers will pass out, collect, and count the ballots, and the results will be announced before the lunch break. All newly elected officers will be installed during the meeting on Saturday.

President's Reception

The MAG will honor our President, Dr. William D. Logan, at a reception and dance beginning at 6:45 p.m., Saturday evening, in the Peach-Willow-Magnolia Rooms.

Criteria For Selection of Recipients of MAG Awards

Hardman Cup

This award is presented for "the active achievement of anyone who in the judgement of the Association has solved any outstanding problem in public health or made any discovery in medicine or surgery" or such contribution to the science of medicine. The recipient of this award will be selected by a five-person secret committee. Nominations for this award have been solicited from component county medical societies. If no nominations and supporting data are received, no award will be made. No nominations will be accepted from the floor. If given, this award will be presented on Thursday evening. By custom, the Hardman Cup usually has gone to a Georgia physician; however, this is not required by the terms of the letter from Governor Hardman establishing this award.

Distinguished Service

The Distinguished Service Award is presented for distinguished and meritorious service which reflects credit and honor on the Association. Nominations for this award have been made by component county medical societies. The recipient will be selected by a five-person secret committee and presentation will be made on Thursday evening.

Civic Endeavor Award

This award, presented for the first time at the 1969 Annual Session, will be given pursuant to an action taken by the 1968 House of Delegates. This award is to be given for outstanding public service and participation in civic activities. Component county medical societies have been invited to make nominations for this award. The recipient will be selected by a three-person secret committee which will determine if the nominees meet the requirements of the resolution which created this award. Presentation will be made on Thursday evening.

Family Physician of The Year

This award is presented to an outstanding family physician in Georgia. The president of the Georgia Academy of Family Physicians (or his designee in the event of his absence) will present this award on Thursday evening.

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Woodridge Hospital, a 32 bed free standing facility is one hundred per cent dedicated to the treatment of addictive diseases. From intervention to aftercare Woodridge's staff makes our unique natural setting second only to their concern. At **Woodridge Hospital** recovery is a philosophy that demands a way of life. It is lived as well as taught by the staff at **Woodridge.** For the complete story call Dr. Richard Turner, our founder & program director and ask him about *our Alcohol & Drug Treatment or our Eating Disorders Program.*

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OFFICIAL

MAG HOUSE OF DELEGATES
CALLAWAY GARDENS INN
PINE MOUNTAIN

THURSDAY, APRIL 24

4:00 p.m. to 7:00 p.m.	REGISTRATION (Convention Center Foyer) Delegates and other Session attendees
7:00 p.m.	GENERAL SESSION (Peach & Willow Rooms) Presiding: William D. Logan, Jr., M.D., President Opening Ceremonies Report of the President of the Auxiliary to the MAG, Mrs. Dent W. Purcell Presentation of MAG Awards Announcements Recess
8:00 p.m. to 10:00 p.m.	HOUSE OF DELEGATES, FIRST SESSION (Peach and Willow Rooms) Presiding: Jack F. Menendez, M.D., Speaker, and James A. Kaufmann, M.D., Vice Speaker Appointment of Convention Committees Nominations for Association Officers and AMA Delegates Reports of Officers and Committees

PROGRAM

Introduction of New Business
Announcements
Recess

FRIDAY, APRIL 25

7:30 a.m. REGISTRATION (Convention Center Foyer)

7:30 a.m. GaMPAC BREAKFAST (Peach and Willow Rooms)

9:00 a.m. REFERENCE COMMITTEE HEARINGS

SATURDAY, APRIL 26

8:00 a.m. REGISTRATION (Foyer)

9:00 a.m. HOUSE OF DELEGATES, SECOND SESSION
(Peach and Willow Rooms)
Keynote Address: Harrison L. (Jack) Rogers, Jr., M.D., President of the AMA
Speakers: William D. Logan, Jr., M.D., President, and John D. Watson, M.D., President-Elect
Report of Reference Committees
Announcement of Election Results

6:45 p.m. PRESIDENT'S RECEPTION AND DANCE

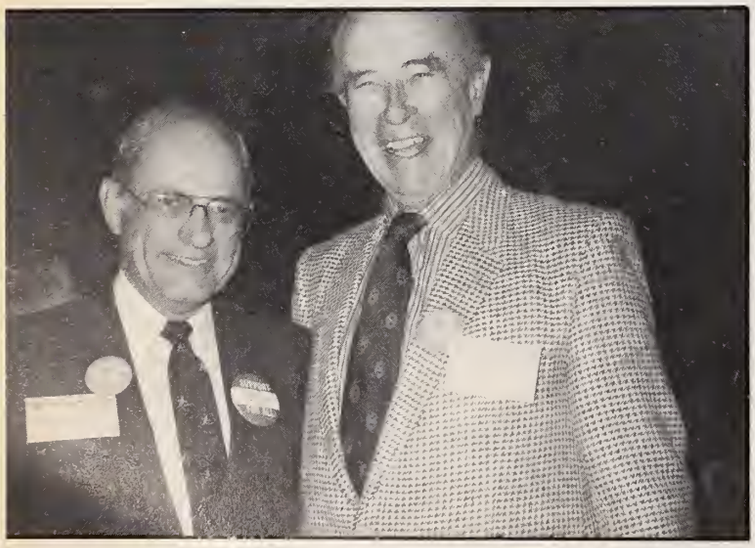
MAG LEADERSHIP



BIGGEST AND BEST YET. . . . Nearly 600 physicians, auxilians, and guests registered for the MAG's 1986 Leadership Conference, held February 2-4 at the Hyatt Regency Hotel, downtown Atlanta.



SPEAKERS AND LEADERS. . . . Sunday afternoon's program featured updates on alternative delivery systems and MAG's IPA-HMO. Gathering for an informal chat during a break in the session are (L-R) Louis H. Felder, M.D., S. William Clark, Jr., M.D., (both of whom addressed the Conference), William W. Moore, Jr., M.D., and Ellis B. Keener, M.D.



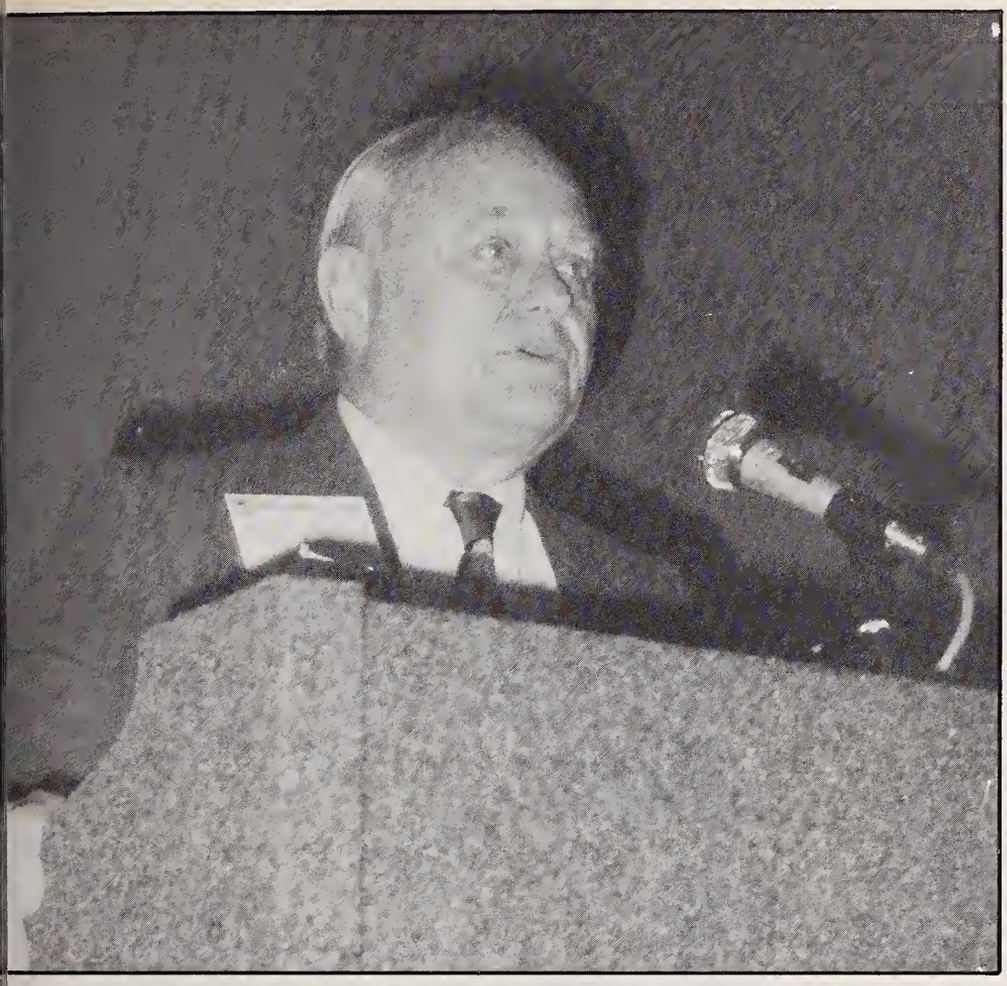
FROM ACROSS THE WAVES. . . . Participating in the liability insurance crisis program on Monday was Peter Kininmonth, a reinsurance broker for Lloyd's of London. On the left is Charles D. Hollis, Jr., M.D., President of MAG Mutual Insurance Company.





AND FROM THE LECTERN. . . . Pictured above is John D. Watson, Jr., M.D., and below him is Louis H. Felder, M.D. Dr. Watson, MAG's President-Elect, moderated Monday morning's Leadership Conference session; Dr. Felder spoke Sunday afternoon on the growth of alternative delivery systems in Georgia.

CONFERENCE





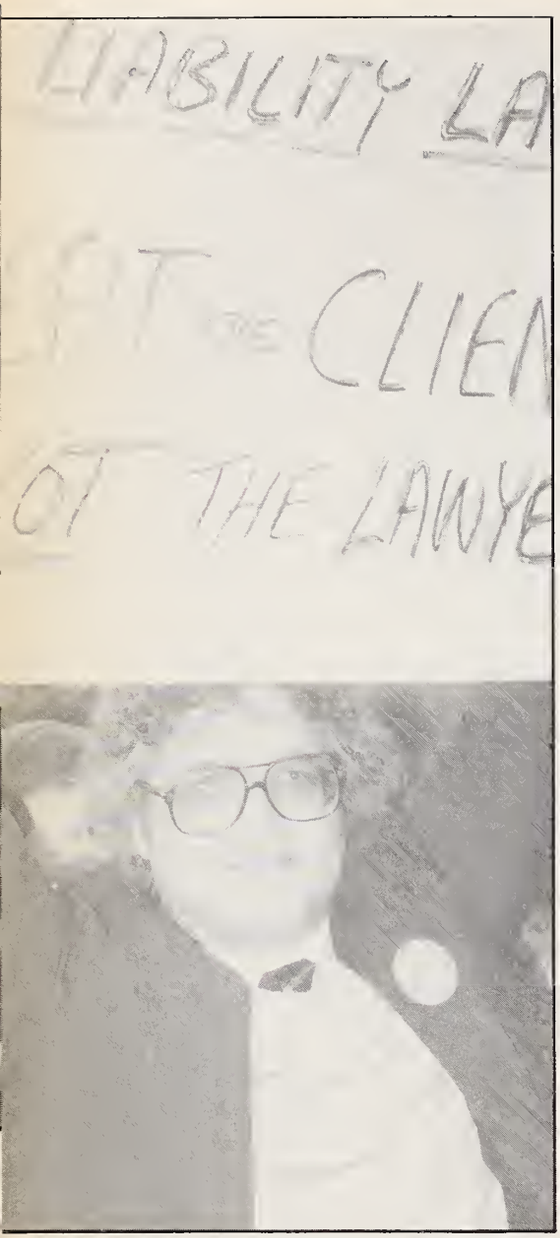


TWO DISTINGUISHED OFFICE-HOLDERS. . . . MAG's President, William D. Logan, Jr., M.D., (top) moderated Sunday and Monday afternoon's session. State Representative Pete Robinson of Columbus (left), a principal sponsor of tort reform legislation in this year's General Assembly, presented his views on Georgia's liability insurance crisis.

MEDICAL ECONOMICS AND THE INSURANCE CRUNCH were the two major themes of this year's Leadership Conference. Cynthia Szal, of the Health Insurance Association of America (top right), spoke on utilization management programs in today's medical marketplace. Warren D. Evans, (bottom right) Georgia's Insurance Commissioner, highlighted Monday's program with his views on the liability crisis.



CAPITOL MASS



A CONCERNED PHYSICIAN. . . . As nearly 2000 Georgia doctors, their spouses, and MAG staff gathered outside the State Capitol on Tuesday morning, February 4, Stanley R. Mogelnicki, M.D., an Atlanta anesthesiologist, drew rounds of applause with his sign, "Revise Liability Law — Benefit The Client, Not The Lawyer."





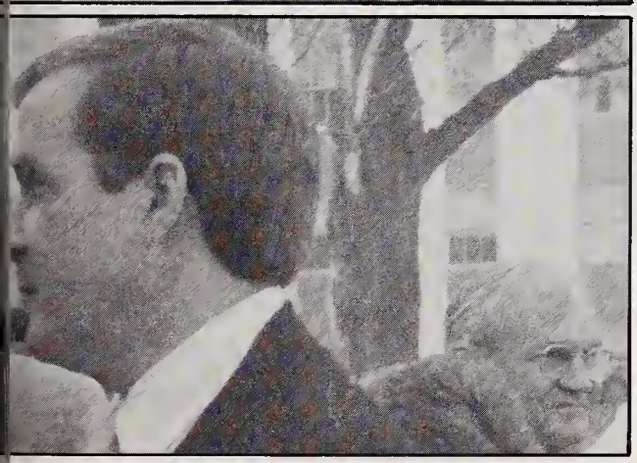
EN ROUTE. . . . Shown at top are passengers of one of the MAG buses which brought Leadership Conference attendees from the Hyatt Regency to the Capitol. Other buses ran a shuttle from the Stadium parking lot; hundreds of doctors rode in on buses arranged by their county medical societies or hospitals.



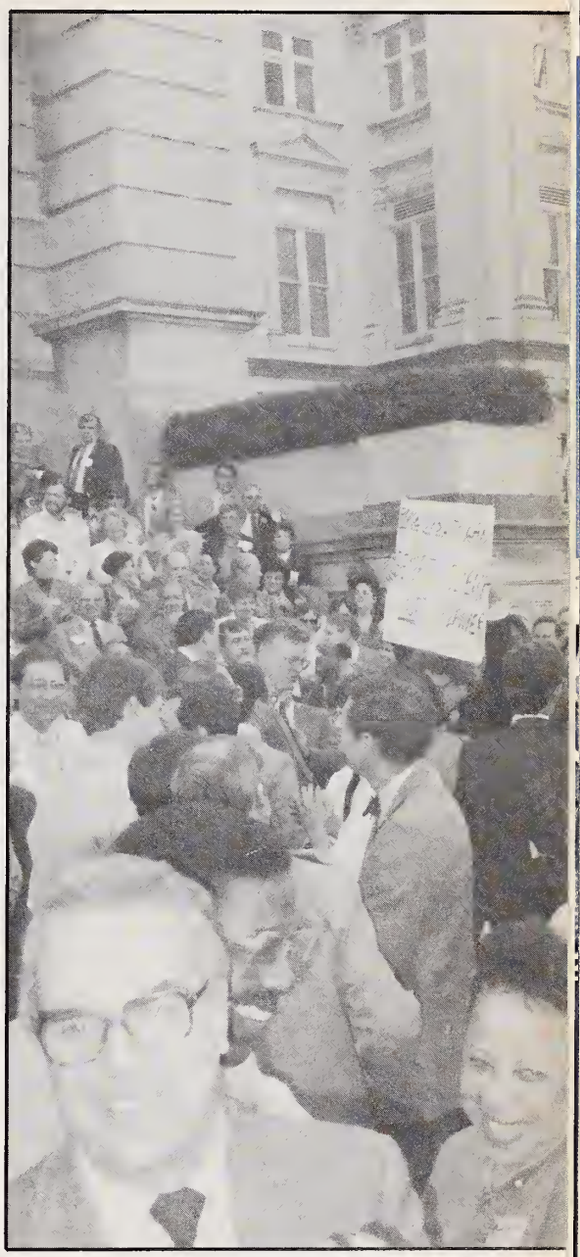
EVIDENCE OF SUCCESS. . . . MAG's mass Capitol visit drew doctors from all over the state, with their buses jamming streets around the Capitol. Shown in the foreground of this photo (left) are physicians from Macon and a few of the numerous television cameramen and reporters who covered our event for the media.

VISITATION



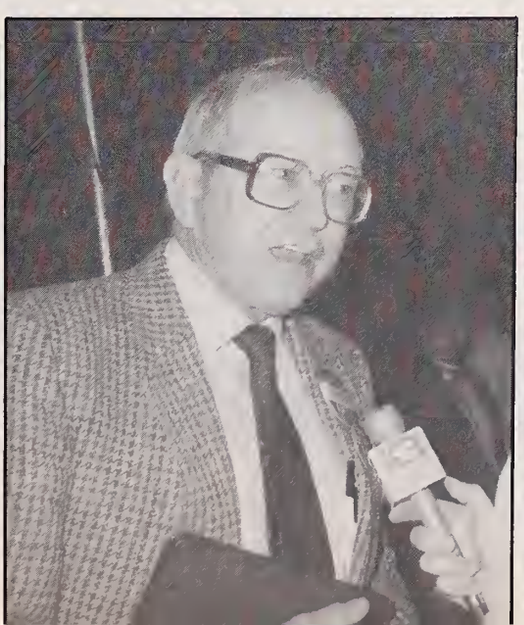


KEY ORGANIZERS of the speakers who addressed the Capitol crowds are shown above (L-R): MAG President Logan; Jeffrey T. Nugent, M.D., Chairman of MAG's Committee on Public Relations; and Rusty Kidd, MAG Director of Legislative Affairs.



PART OF THE CROWD which clogged the Washington Street entrance to the Capitol is shown above. Can you spot Mrs. Dent W. Purcell, President of the Auxiliary to MAG?

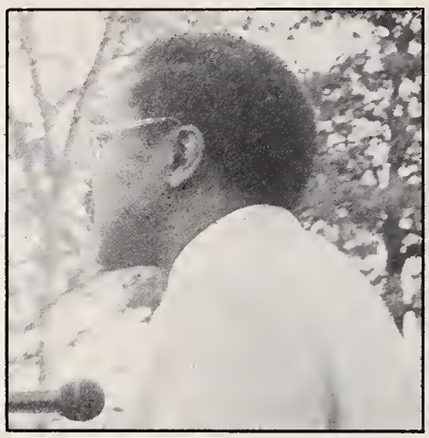
IN THE CAPITOL, AFTERWARD. . . . After our speakers' program, virtually the whole crowd moved inside the Capitol building to visit with their legislators. At left, Ralph A. Tillman, M.D., MAG's Secretary, is shown being interviewed by a reporter; in the other photo, John T. Yauger, M.D., (L) of Atlanta and another MAG physician converse with James A. Kaufmann, M.D., (center) Chairman of MAG's Legislative Committee.





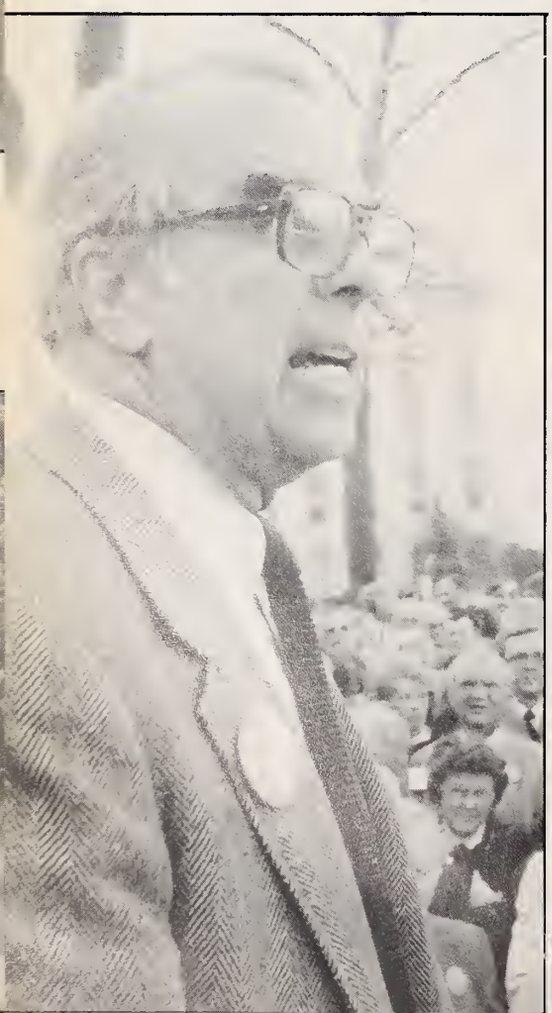


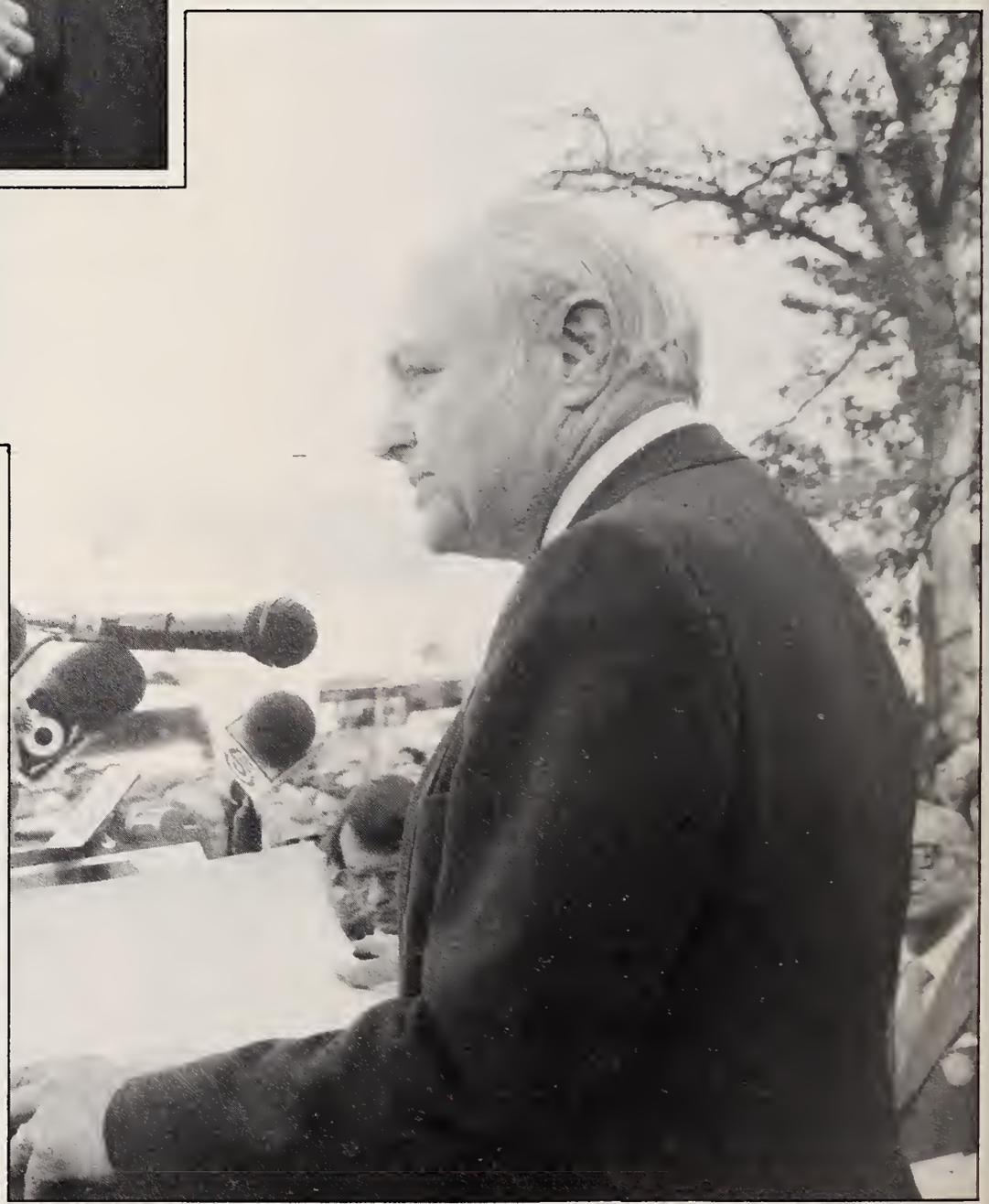
LIEUTENANT GOVERNOR ZELL MILLER was honored guest speaker in our program outside the Capitol.





DELIVERING THEIR MESSAGE. . . . Shown above are two physicians who addressed the liability insurance crisis during the Capitol visitation: (left) Sam O. Atkins, M.D., Atlanta urologist and President-Elect of the Georgia State Medical Association; and Martin H. Smith, M.D., of Gainesville, President of the American Academy of Pediatrics.





(TOP) "THE PENDULUM HAS SWUNG TOO FAR!" proclaimed MAG President Logan, as he reviewed the rise of frivolous lawsuits against physicians today. (LEFT) ROBERT E. WELLS, M.D., Past President of the American Academy of Orthopaedic Surgeons, also spoke to the nearly 2000 people crammed onto the sidewalks outside the Capitol building.

LIFE FLIGHT

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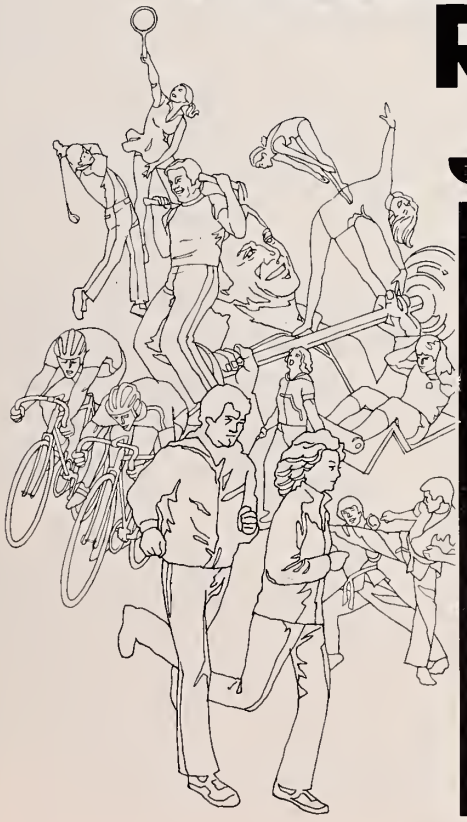
To arrange for Life Flight service, or for more information, call 1-800-282-1492 (From Georgia) or 404-659-LIFE (Collect, from other states). 24 hours a day, 7 days a week.

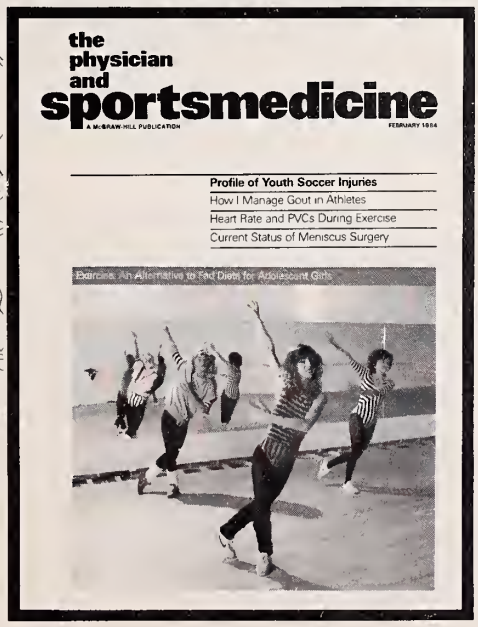


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Mammography: The Hope for Survival of Breast Cancer

Milford B. Hatcher, M.D.

"The radiography technique is constantly improving and is now using dramatically less rads or dosage of irradiation."

WHY HAS treatment of breast cancer shown so little improvement in mortality and morbidity since 1890-91 when Dr. William S. Halstead[1] first described his operation: a block resection of all involved and potentially involved tissue? Simply stated, the answer is that the diagnosis was not made until late in the disease. A lump or obvious physical change in the breast had to be seen or felt before treatment was started.

There have been tremendous changes in the diagnosis of breast cancer since 1960 when Dr. Robert L. Egan[2] first presented his series of mammograms to be used in the diagnosis of breast cancer. It is true that some cancers are still found as painless lumps, often by the patient. That is why we strongly advise self breast examination monthly for all women. By the time the lesion is large enough to palpate, however, it has usually advanced to such a degree that spread or metastasis may have occurred.

For the first time since 1890, we are seeing an improvement in our prognosis for breast cancer. With the use of mammography, we are diagnosing cancers that cannot be felt. A recent Swedish study[3] of 162,000 cases found 31% fewer deaths among women over 40 who underwent a routine breast x-ray study. The sad part of our story is that only very few doctors recommend such annual mammograms in women over fifty, as studies have shown.

Screening mammography is a potentially life-saving cancer detection examination used in asymptomatic women to discover early breast cancer. The radiography technique is constantly improving and is now using dramatically less rads or dosage of irradiation. (The amount of irradiation received in multiple x-rays has been of concern to many.)

In general, it is thought that only 45% of breast cancers are found before axillary node metastasis has occurred. However, 95% of cancers detected by mammography alone are localized to the breast, according to statistics from 28 American Cancer Society studies.[2] In 34 National Cancer Institute-funded cancer detection demonstration projects, which included 273,108 women, over 80% earlier cancers were found by mammogram.[4]

"For the first time since 1890, we are seeing an improvement in our prognosis for breast cancer."

How can we improve our mortality and morbidity rates further? Simply by making more early diagnoses. The best method we now know for achieving this is by more patients being offered and accepting a mammogram so that early abnormal changes in the breast parenchyma can be detected.

Mammograms can also help to identify high risk patients and so advise annual mammograms.

One reasons for not doing mammograms in the past has been the lack of availability of properly trained and qualified personnel, both radiologists and technicians. This is being corrected, and an accuracy rate of 85 to 92% has been reported in picking up suspicious lesions.[5] Irradiation risk has been another stated reason for not doing mammograms. The irradiation exposure has been decreased from 8 rads to 0.3 rads, with the midbreast dosage of 0.02 to 0.03 rads.[6]

In our study of suspicious lesions found by mammography and in which the radiologist advised biopsy, we have found 23% to be malignant. These were lesions with no palpable mass and which could only be diagnosed by mammogram. Several years ago, we developed a method of localizing these lesions radiologically to enable the surgeon to excise the suspicious lesion with minimal breast deformity and to pick up lesions of minimal size, such as preinvasive cancer.

American Cancer Society Guidelines

The American Cancer Society recommends the following guidelines for breast cancer detection:

1. All women over the age of 20 years should perform monthly breast self-examination;

2. All women 20 to 40 years of age should have a breast examination every three years, and women over 40 should have an annual breast examination;

3. Women between 35 and 39 years should have a baseline mammogram; women between 40 and 49 years should have a mammogram at 1 to 2 year intervals; and

4. Women over 50 should have a mammogram every year.

"Screening mammography is a potentially life-saving cancer detection examination used in asymptomatic women to discover early breast cancer."

Summary

We are receiving reports which show survival rates of breast cancer improving. There is a more favorable prognosis in early detected cancer, especially those that can only be found by mammography. Some have reported a 95% cure rate[7] in these cases.

Currently, the use of screening mammography by physicians of asymptomatic women is limited due to concern of irradiation risk, cost, and availability of sufficient qualified diganosic radiologists. The American Cancer Society is working on each of these problems.

I think mammograms have proven their value. We as physicians should utilize this great diagnostic tool by carrying out the American Cancer Society recommendations. I especially recommend a mammogram in those patients at "high risk" or with suspicious physical findings, as well as women above age 40.

Doctor, are you one who increases a woman's chances of surviving breast cancer by recommending mammograhy? I hope so.

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Dr. Hatcher is Chairman-Professor, Department of Surgery, Mercer University School of Medicine, 1400 Coleman Ave., Macon, GA 31207.

This article was prepared at the request of the American Cancer Society, Georgia Division.

Cold Remedies and Heart Disease

Tyra Bryant-Stephens, M.D.

"The purpose of this article is to remind the physician of the potentially hazardous effects of cold remedies in infants and children."

OVER-THE-COUNTER and prescribed cold remedies are the most widely used drugs available today. It is not uncommon for a patient to ingest a combination of six to ten different drugs during a single illness. A child may be expected to have three to six respiratory infections per year, with an even greater frequency during the second and third years of life.[1] The most common pharmacologic ingredients in these cold remedies belong to the subclass of decongestants, which have a multitude of side effects. These include nervousness, insomnia, restlessness, headache, chest tightness, palpitations, dizziness, and hypertension.[2]

Pediatricians and family physicians need to be aware of these potentially hazardous effects, particularly cardiovascular, on the growing normal child as well as the child with cogenital or acquired heart disease. These "harmless' cold remedies may in fact be more harmful than the common cold, a self-limited entity. The purpose of this article is to remind the physician of the potentially hazardous effects of cold remedies in infants and children.

Phenylpropanolamine and pseudoephedrine are used in more than 100 over-the-counter preparations, as well as in many commonly prescribed decongestants. Phenylpropanolamine overdosage was initially recognized as leading to severe hypertension and potentially fatal dysrhythmias as a component of over-the-counter diet pills.[3] A recent report reveals that phenylpropanolamine in a single oral dose of 50 to 75 mg may lead to severe hypertension.[4] The frequency of phenylpropanolamine toxicity reported to poison control centers increased ten-fold between 1975 in 1980.[5] This alarming statistic coupled with the increased availability of phenylpropanolamine dictates the need for more comprehensive investigation of its effects on the cardiovascular system.

"Physicians need to closely monitor the use of cold remedies in their practice until there is conclusive evidence that the benefits of cold remedies far outweigh the possible risks in an otherwise self-limited disease."

Pentel *et al.*[6] reported two cases of myocardial injury secondary to phenylpropanolamine, evidenced by ST segment depression and ventricular

arrhythmias. Other reports have indicated that as little as 50 mg per day may lead to transient hypertension, premature ventricular contractions, premature atrial contractions, and ventricular tachycardia.[7] Arrhythmias induced by relatively low doses have been transient and/or reversible. However, most side effects have been described in adults and the long-term effects of phenylpropanolamine on the cardiovascular system are unknown.

"Phenylpropanolamine and pseudoephedrine are used in more than 100 over-the-counter preparations, as well as in many commonly prescribed decongestants."

Pseudoephedrine has not been implicated as a source of myocardial injury, though it has known inotropic effects because of its structural relationship to ephedrine. Several mechanisms have been postulated to explain the cardiovascular side effects of phenylpropanolamine and pseudoephedrine. These effects are related to their structural similarity to amphetamine. Phenylpropanolamine and pseudoephedrine are called "look-alike" drugs of amphetamine because they share the parent amine phenylethaline (Figure 1). The peripheral action of these compounds is directly related to alterations of phenylethaline's structure. Substitution of the beta carbon with an hydroxyl group gives phenylpropanolamine and pseudoephedrine (D-isomer of ephedrine) an increased effect on heart rate and blood pressure, i.e., alpha adrenergic effect. Furthermore, substitution on the alpha carbon leads to prolongation of this alpha action by phenylpropanolamine and

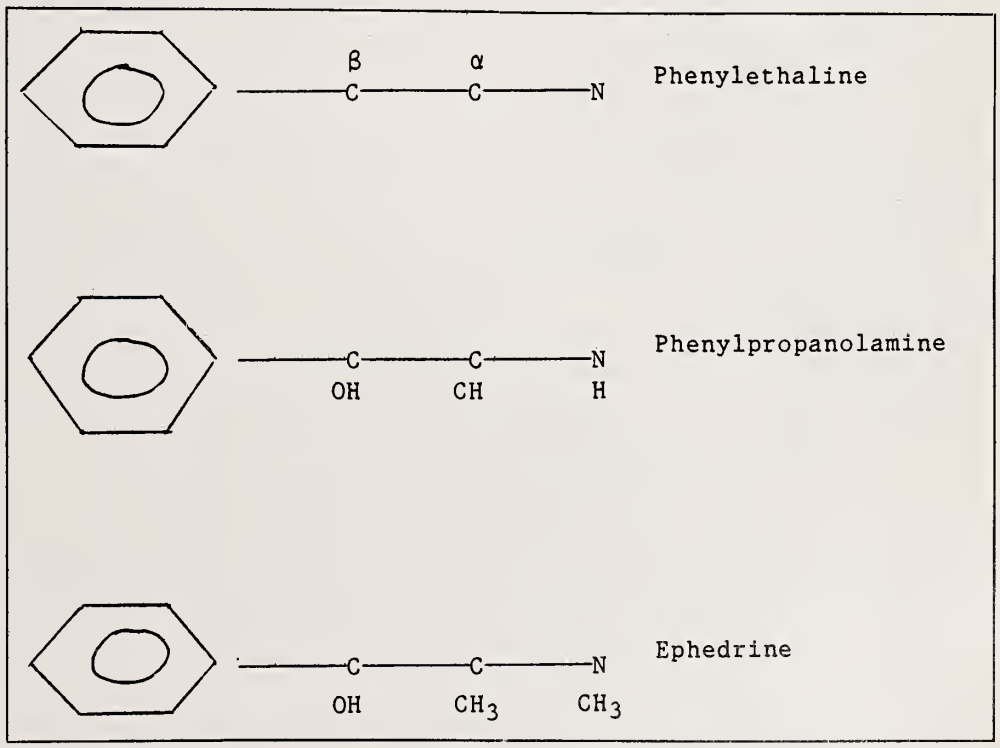


Figure 1 — Structures of phenylethaline, phenylpropanolamine, ephedrine.[8]

Dr. Bryant-Stephens is from the Department of Pediatrics, Medical College of Georgia, Augusta, GA 30912.

This article was prepared at the request of the American Heart Association, Georgia Affiliate.

pseudoephedrine. However, unlike phenylpropanolamine, ephedrine also has a substitution on its amino group leading to a greater beta adrenergic effect and therefore a greater inotropic effect than phenylpropanolamine.[8]

With these structural properties in mind, one can postulate the following mechanisms for the induction of hypertension and cardiac arrhythmias by these agents. Phenylpropanolamine has both a direct alpha adrenergic action on the peripheral vasculature leading to potent vasoconstriction as well as an indirect effect by releasing norepinephrine from sympathetic nerve endings. The mechanism proposed for arrhythmia induction is peripheral vasoconstriction followed by increased blood pressure, then reflex bradycardia. The bradycardia permits an ectopic pacemaker to take control, resulting in ventricular or supraventricular arrhythmias.[5]

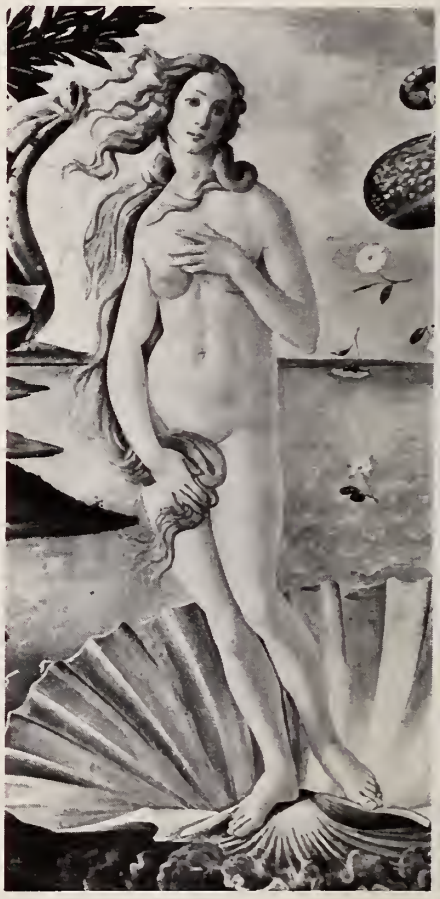
"The frequency of phenylpropanolamine toxicity reported to poison control centers increased ten-fold between 1975 and 1980."

Pseudoephedrine, because of its potent beta adrenergic activity, has a direct effect on the myocardium, causing increased contractile force and increased cardiac output. Its indirect effect, like that of phenylpropanolamine, is due to increased release of norepinephrine from sympathetic nerve endings. The ability of both phenylpropanolamine and pseudoephedrine to stimulate the release of norepinephrine may result in myocardial injury secondary to excessive adrenergic stimulation.[6] This phenomenon was demonstrated in 1959 by Chappel *et al.*[9] on rabbit papillary muscle.

Admittedly, there is not conclusive evidence that either of these agents directly leads to myocardial injury. However, with case reports becoming more frequent and with the easy availability of over-the-counter preparations containing these agents, physicians need to closely monitor the use of cold remedies in their practice until there is conclusive evidence that the benefits of cold remedies far outweigh the possible risks in an otherwise self-limited disease. It is imperative that physicians educate their patients concerning possible side effects of the use and abuse of these agents.

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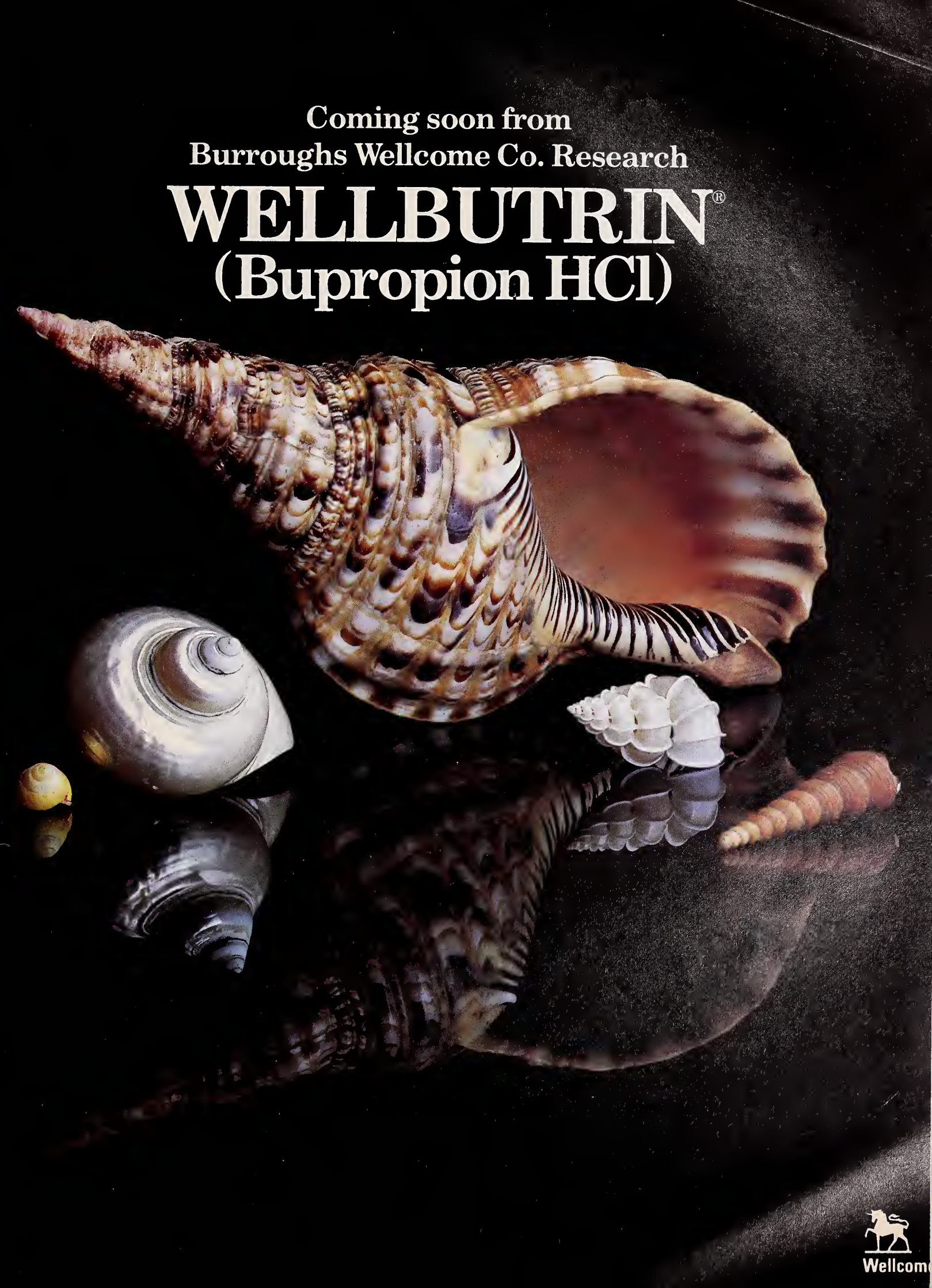
Low-dose breast x-ray, mammography, is giving hope that the leading cause of cancer deaths in women will be greatly diminished.

We urge women without symptoms of breast cancer, ages 35 to 39, to have one mammogram for the record, women 40 to 49 to have a mammogram every 1 to 2 years, and women 50 and over, one a year. Breast self-examination is also an important health habit and should be practiced monthly. Ask your local Cancer Society for free leaflets on both subjects.

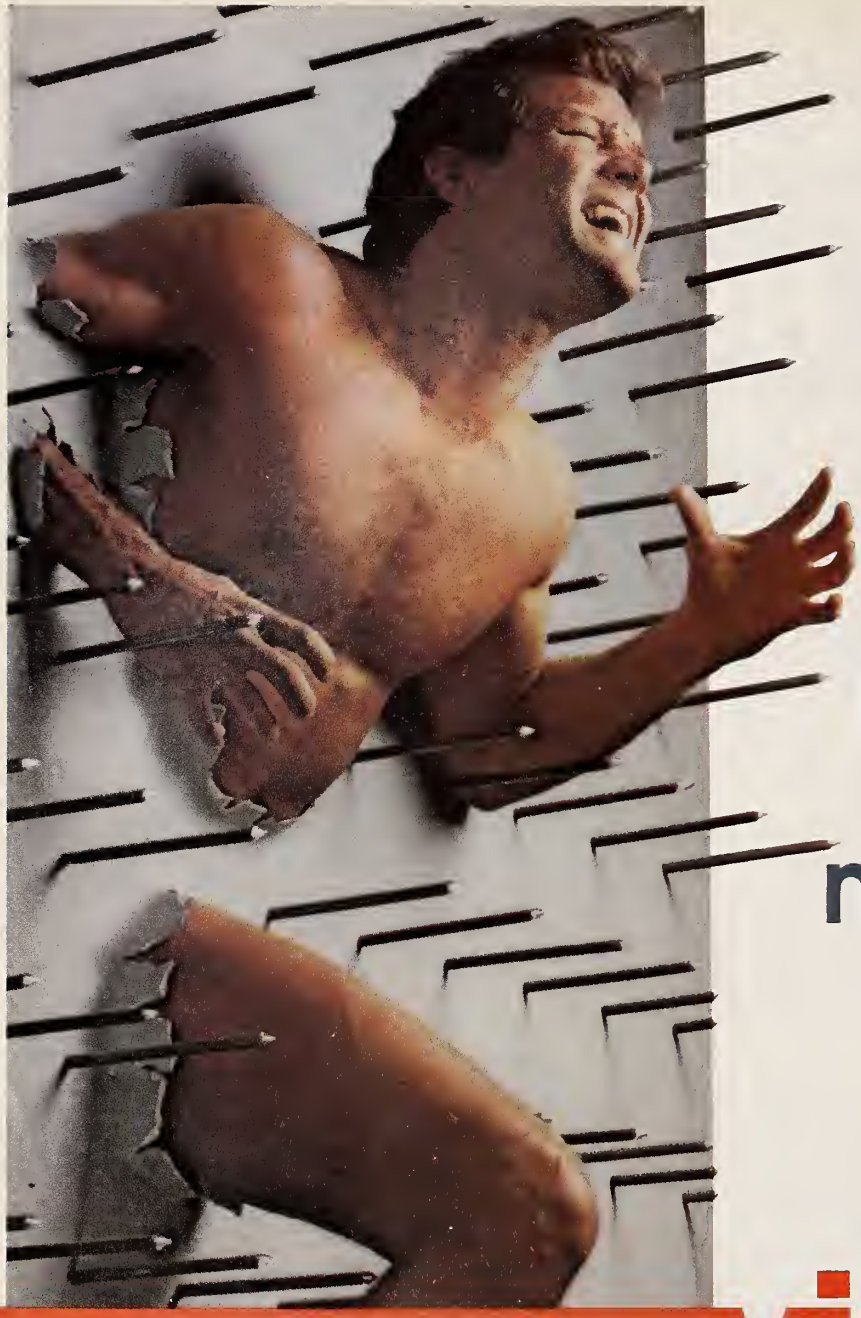
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Acute Abdominal Conditions. The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.
PRECAUTIONS
Special Risk Patients: VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.
Information For Patients: VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.
Cough Reflex: Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.
Drug Interactions: The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.
Usage in Pregnancy. Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
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Pediatric Use: Safety and effectiveness in children have not been established
ADVERSE REACTIONS
Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.
Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.
Genitourinary System. Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.
Respiratory Depression: (See WARNINGS.)
DOSAGE AND ADMINISTRATION. Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.
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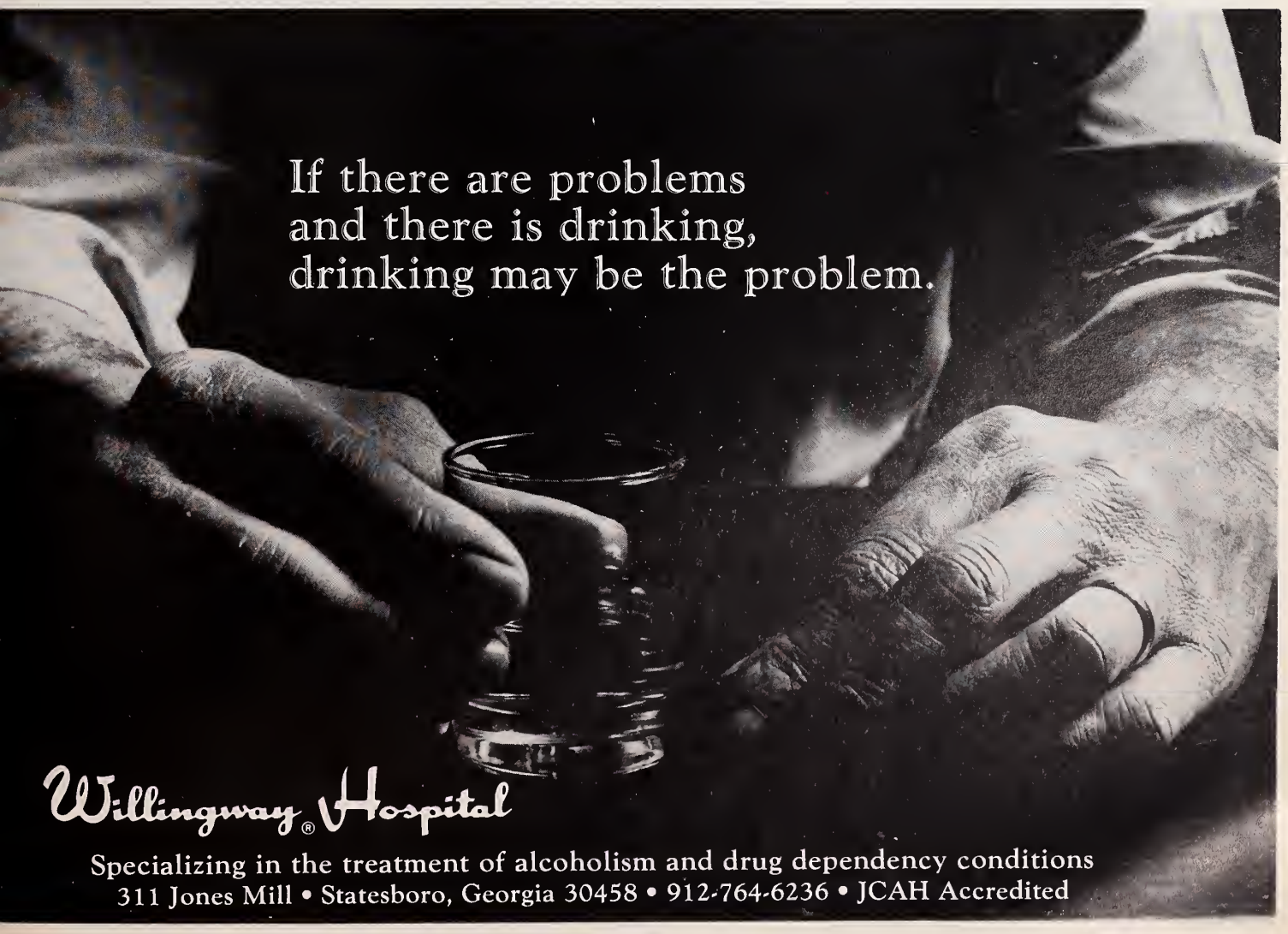
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Snyder, Scott, Crawford W. Long — ACT — P
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PERSONALS

Third District

Family practitioner, **J. B. Polhill, M.D.,** joined the staff of the Medical Center in Dublin. Dr. Polhill was practicing at the Ochsner Clinic in New Orleans for the past year.

Fifth District

Charles R. Hatcher, Jr., M.D., cardiothoracic surgeon at Emory University, has assumed the presidency of the Society of Thoracic Surgeons. Dr. Hatcher was inaugurated at the Society's annual meeting held in Washington, DC, in January. In addition to his positions as head of cardiothoracic surgery at Emory and professor of surgery in the Emory School of Medicine, Dr. Hatcher is vice president for Health Affairs at Emory and Director of The Robert W. Woodruff Health Sciences Center.

Sixth District

David S. Mann, M.D., recently closed his long-standing family practice in Macon. He has started working as a physician in the Carl Vinson VA Medical Center in Dublin.

Seventh District

Marietta urologist, **Harold P. McDonald, Jr., M.D.,** has been named a surveyor for the Accreditation Association for Ambulatory Health Care, Inc.

J. Larry Boss, M.D., a family practitioner from Villa Rica, has been appointed by Governor Joe Frank Harris to the Joint Board of Family Practice.

Tenth District

Vendie H. Hooks, III, M.D. of Augusta, was recently named a Fellow of the American College of Surgeons. Dr. Hooks is a diplomate of the American Board of Surgery and the American Board of Colon and Rectal Surgery.

DEATHS

W. R. Baker, Sr.

W. R. Baker, Sr., M.D., a surgeon from Hawkinsville, died in January.

A North Carolina native who attended Wake Forest College, Dr. Baker received his medical degree from Emory University and completed his residency in surgery at Grady Memorial Hospital. He served in the Pacific Theater during World War II, and came to Hawkinsville in 1946.

Dr. Baker's name is permanently affixed to the school he helped start by donating land for its construction. Advancing age did not deter him from his calling, as he continued to serve his patients until a matter of days before his death.

Charles R. Andrews, Jr.

Charles R. Andrews, Jr., M.D., 77, a surgeon from Canton, died February 3. He had been hospitalized recently with pneumonia and other complications from cancer.

Dr. Andrews was past president of MAG and National Surgeon General of the Veterans of Foreign Wars. His dedicated support of the V.F.W. led to his being declared "Mr. V.F.W." in 1985.

He graduated from Emory University

and did postgraduate work at Grady Memorial Hospital. He was past president of Georgia Chapter of the American College of Surgeons, Fellow of International College of Surgeons, member of the Southeastern Surgical Congress, past president of the Cherokee-Pickens Medical Society and Ninth District Medical Society, and was on the Administrative Council of the MAG for 25 years.

Surviving are his wife, three daughters, one son, and 12 grandchildren.

QUOTES

What is truly indispensable for the conduct of life has been taught us by women — the small rules of courtesy, the actions that win us the warmth or deference of others; the words that assure us a welcome; the attitudes that must be varied to mesh with character or situation; all social strategy. It is listening to women that teaches us to speak to men.
REMY DE GOURMONT

The true pleasures are almost innumerable. Relations and friends, conversation, books, music, poetry, art, exercise and rest, the beauty and variety of nature are but a few of them.
JOHN LUBBOCK

The good life is not only good for one's conscience; it is good for art, good for knowledge, good for health, good for fellowship.
LEWIS MUMFORD

A man can hardly be said to have made a fortune if he does not know how to enjoy it.
VAUVENARGUES

We act as though comfort and luxury were the chief requirements of life, when all that we need to make us really happy is something to be enthusiastic about.
CHARLES KINGSLEY

Every great and commanding moment in the annals of the world is the triumph of some enthusiasm.
RALPH WALDO EMERSON

Kind words are the music of the world.
FREDERICK W. FABER

The responsibility of tolerance lies with those who have the wider version.
GEORGE ELIOT

My theory is to enjoy life, but the practice is against it.
CHARLES LAMB

The ideal man bears the accidents of life with dignity and grace, making the best of circumstances.
ARISTOTLE

Kindness is in our power, but fondness is not.
SAMUEL JOHNSON

Let your friends be the friends of your deliberate choice.
BALTASAR GRACIAN

Things refuse to be mismanaged long.
RALPH WALDO EMERSON

Source: *Forbes*

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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

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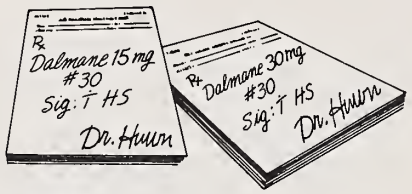
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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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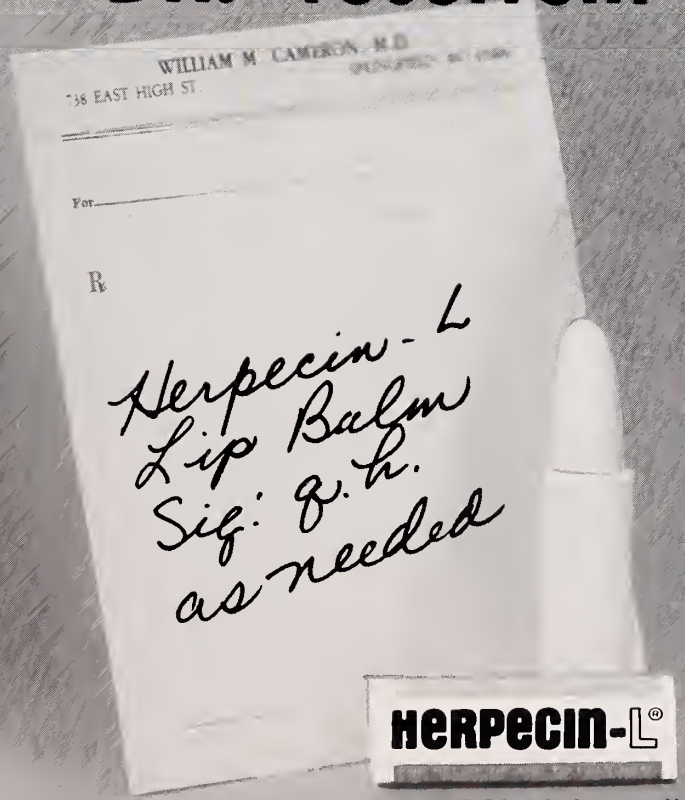
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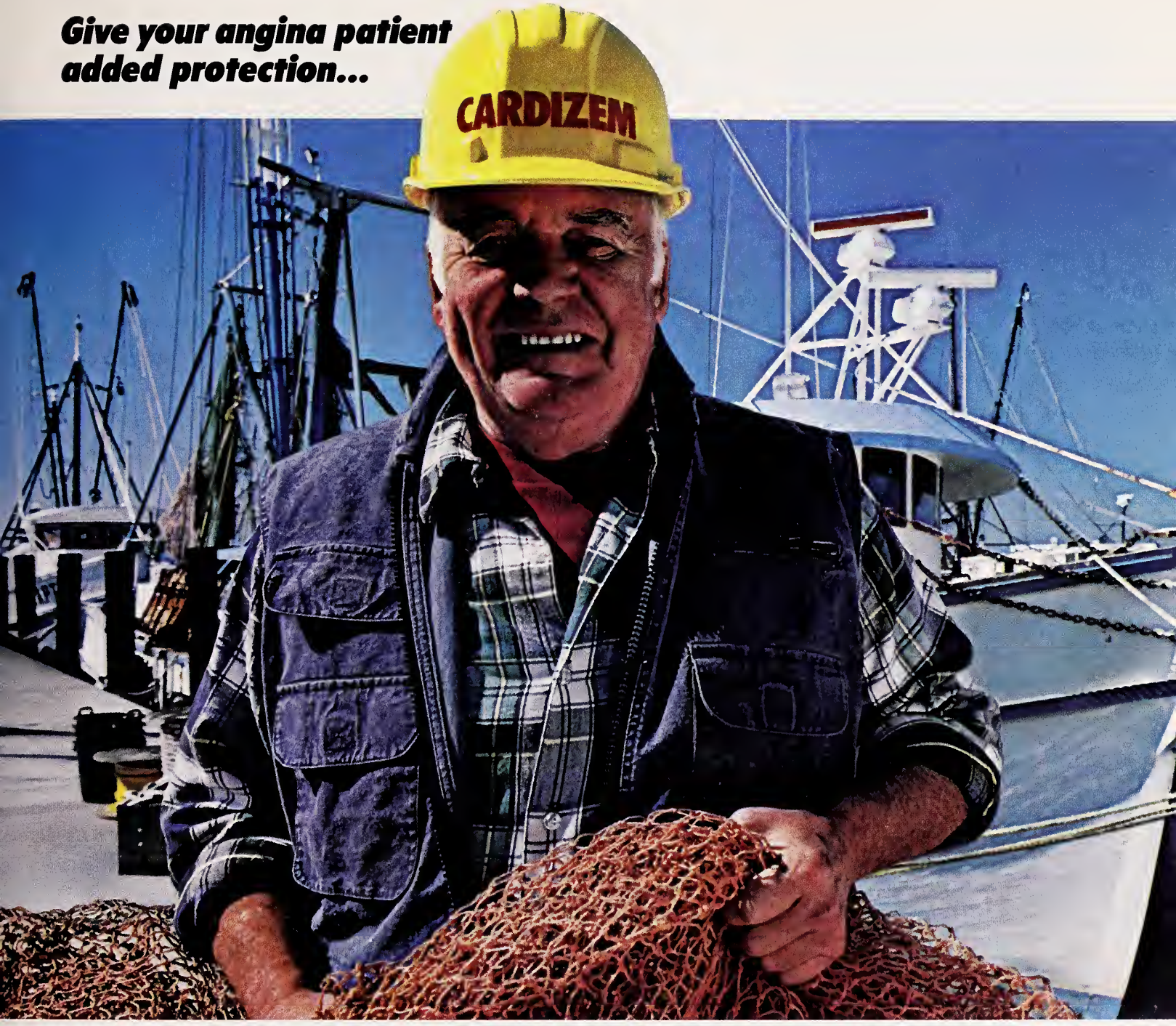
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1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGDT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGDT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

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CARDIZEM 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other. Issued 4/1/84

See complete Professional Use Information before prescribing.

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References: 1. *Physicians' Desk Reference®* ed 39. Dradell, NJ, Medical Economics Company Inc, 1985. **2.** Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. **3.** Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982; 50(Sept):94-116. **4.** Subramanian VB: Comparative evaluation of four calcium antagonists and propranolol with placebo in patients with chronic stable angina. *Cardiovasc Rev Rep* 1984; 5:91-104. **5.** Schroeder JS, Feldman RL, Giles TD, et al: Multiclinic controlled trial of diltiazem for Prinzmetal's angina. *Am J Med* 1982; 72:227-231. **6.** Weiner DA, McCabe CH, Cutler SS, et al: The efficacy and safety of high-dose verapamil and diltiazem in the long-term treatment of stable exertional angina. *Clin Cardiol* 1985; 7:648-653. **7.** Shapiro W: Calcium channel blockers. Actions on the heart and uses in ischemic heart disease. *Consultant* 1984; 24(Dec):150-159.

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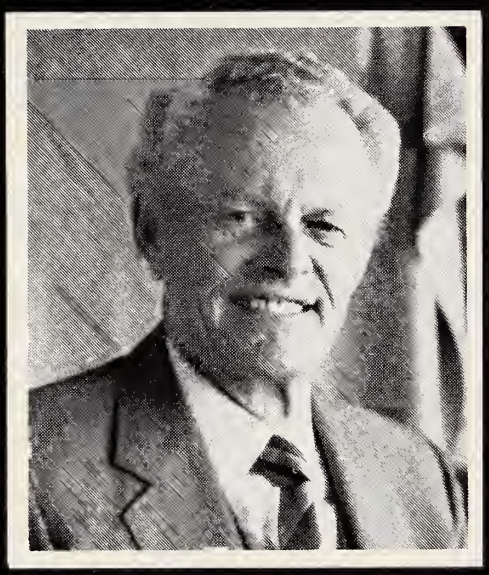
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24-26 — *Callaway Gardens:* **MAG House of Delegates.** Contact MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Georgia).

25-26 — *Atlanta:* **Recent Advances in Clinical Oncology.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5696.

28-May 3 — *Augusta:* **21st Annual Family Practice Symposium.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

MAY

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1-2 — *Atlanta:* **Pediatric Rheumatology Update '86.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

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4-7 — *Sea Island:* **Georgia Society of Ophthalmology Annual Meeting.** Category 1 credit. Contact Talitha Russell, MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga).

9 — *Atlanta:* **Symposium on Neuromuscular Diseases.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

9-10 — *Augusta:* **Georgia Pathologists Association's Risk Management Series II.** Category 1 credit. Contact James Moffett, Dir., Specialty Society Relations, MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

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As my year as President of M.A.G. comes to a close, it presents a time of contemplation. Not only have I attempted to evaluate the actual accomplishments but also the feelings and impressions that have presented themselves regarding my role in this particular and unique position. The words honor, responsibility, and humility, convey, in a broad sense, some of my feelings, but these seem too standard and of the usual rhetoric and do not fully paint the picture I feel. For instance, there are feelings of "belonging" that emerge as a real binding force. Certainly M.A.G. is my organization to which I have been completely dedicated this year. These feelings also portray the tremendous support that I have felt during this particular time from the M.A.G. members and staff. Through differences and agreements, one realizes the strong bond that unites us. Although this tremendous respect and support is obviously for the position, there is no way to adequately describe the personal buoyancy this feeling brings.

Accompanying this buoyancy, there occasionally creeps into my thoughts a sudden fear that I might do something wrong and embarrass or cause discredit to the organization. This is not so much a worry about my personal self but for the group. There follows a deep sense of relief as the time draws near for the end of my term in office without any major catastrophe.

The development and continuation of so many very personal friendships and relations cannot be adequately described. They become the reward that repays your every effort and the added hours of involvement.

No one individual causes many sweeping changes but one can only hope that there may be some footprints left that will make things a little better for those who follow.

"I expect to pass through this world but once;
Any good thing therefore that I can do,
Or any kindness that I can show to any
Fellow creature, let me do it now,
Let me not defer or neglect it,
For I shall not pass this way again."



William D. Logan, Jr., M.D.

I first became aware of this caption after having spent a few months of voluntary service aboard the old hospital ship HOPE. *My family and office staff presented me with a plaque bearing this inscription, and I was impressed. Again, last year, as I assumed the position as President of M.A.G., my daughter presented me with a cake with this inscription on it. It is very poignant, and, again, I was most impressed.*

I should like to think that I accepted this inscription not as an accolade but as a challenge. With this thought, I have tried to approach this year with a feeling of purpose and desire. Of course, each day is a new day and a once in a lifetime experience, but this past year has been extra special. So let me say to you how much I appreciate your fantastic support for me and the Medical Association of Georgia this year. I feel the great spirit of M.A.G. will continue and we will have a great future. Indeed, each day is a "Once in a Lifetime" experience.

Wm. D. Logan Jr.

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For the purpose of this discussion, let us say that there are two types of knowledge: that which we have in our brain and that which resides in databases. Increasingly, a greater amount of information (knowledge) must be obtained from databases, such as Medline. Hundreds of databases are available now. Computerized access to these databases has not been too user friendly to date, but great strides are being made.

Two years ago, a grant was obtained by the Medical Library of Mercer University School of Medicine and the Georgia Interactive Network (GAIN) was formed. Anyone with a computer and a communication modem has been able to sign up and receive an 800 phone number to use to call up the computer. On line, one is able to obtain medical references from the medical librarians, call on consultants in your field, do a MEDLINE search at the National Library of Medicine, and use the Bulletin Board to communicate with other members of the GAIN network.

The Medical Association of Georgia has formed a Computer Committee that will work closely with the GAIN Committee. The challenge of both of these committees is to establish a statewide computerized telecommunication network. The members of these committees have been carefully chosen. Various levels of sophistication will be presented, and all of us will be learning and helping each other.

Basically, the plan is this. We are attempting to find a reasonably priced computer terminal that will allow you to communicate with the main computer and thereby communicate with each other and the available databases. Texas Instruments will have a computer terminal, monitor, keyboard, modem, and a small printer for about $900. For $100 a year, you can obtain an 800 telephone number that you could use any hour of the day and any day of the week.

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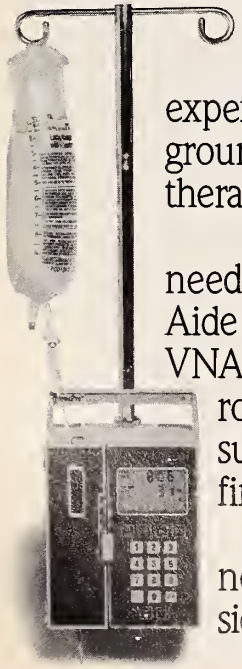


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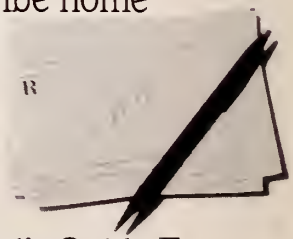
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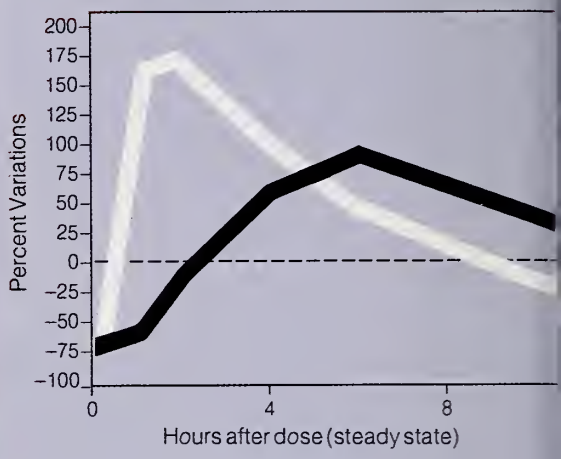
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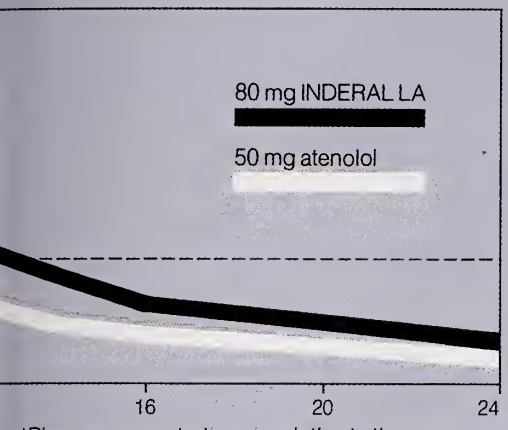
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WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Once-daily INDERIDE® LA

Each capsule contains propranolol HCl (INDERAL® LA), 80 mg, 120 mg, or 160 mg, and hydrochlorothiazide, 50 mg



The appearance of these capsules is a registered trademark of Ayerst Laboratories.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

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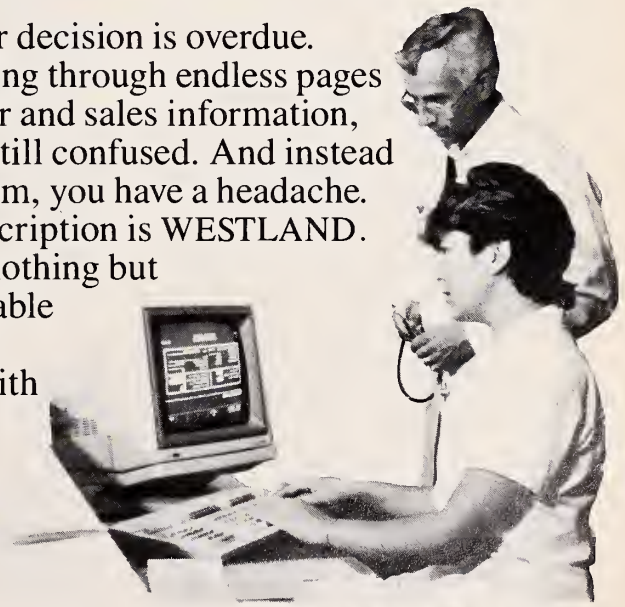
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TAKIN' IT TO THE STREETS: THE DOCS LISTEN TO THE DOOBIES

PRESTON RUSSELL, M.D.

One member's insightful and amusing perspective of the Capitol Mass Visitation.

"You don't know me but I'm your brother. . .
You can't find me in your world. . .
Take this message to my brother; you can find him everywhere.
I ain't blind and I don't like what I think I see. . .
Pretty soon the time will tell — takin' it to the Streets.
Takin' it to the streets/Takin' it to the streets."
The Doobie Brothers

I wish to share an impressionistic firsthand view of an event which directly affects us all — and refreshingly not just doctors. It was the February 4th M.A.G. demonstration at the State Capitol regarding tort reform. From 2,500 (M.A.G. count) to 3,500 (media count) gathered on the Capitol steps, including at least several dozen from Savannah, counting spouses and even babes in arms or back packs. It would be invidious to name only the ones I saw, except to see Candler/St. Joseph/MMC/hospital-based/office-based types all shoulder-to-shoulder in some new lion and giraffe version of Edward Hicks' "Peaceable Kingdom."

"Speeches were in the William Jennings Bryan tradition, as occasional placards roused partisan cheers from either thousands of medical types or hundreds from the Georgia Trial Lawyers Association."

Speeches were in the William Jennings Bryan tradition, as occasional placards roused partisan cheers from either thousands of medical types or hundreds from the Georgia Trial Lawyers Association. "We" wore little blue buttons saying *"Support Civil Justice Reform — 1986"* and "they" wore large red, white, and blue buttons proclaiming *"Support Justice for All."* (As advised, I got one of "theirs," to proudly — if confusingly — wear both). Another small group was quite visibly propped up, according to *Newsweek;* (several dozen) of "the lame, the halt and the blind. . . *chaperoned* by about 200 lawyers (see below), they carried signs reading: 'Doctors bury their mistakes.' " Also, "I was *not* born this way, surgery did it!" "A Doctor's Mistake" was the simple epitaph beneath a large photo of a beautiful young girl.

And so on. As to "chaperoning," this demonstrator would only admit the legitimate tragic cause of death was "from cancer" but otherwise — "my lawyer told me not to talk about the case." She had been flown in from Florida. I heard others were brought in from surrounding states, badly denting truth and introducing double entendre to *Newsweek's* statement, "Georgians *who said* they were the victims of malpractice." I had thought our last speaker was resorting to humorous hyperbole when he told us we were going into battle — "this is a war!"

As for our public presentation, we did "pretty well" — assuming you were there. A man from Mars would agree that the U.P. story in the Savannah paper was a near facsimile of what he saw the day before when he first visited the Capitol. The Atlanta

Dr. Russell practices pathology. Send reprint requests to him at P.O. Box 23103, Savannah, GA 31403.

paper filed their version from the planet Venus. If you want a taste of the day, plus a concise 2-page overview of the pandemic problem, read the Feb. 17 *Newsweek* article. Not to worry. There is plenty of blame and responsibility to be shared by at least four parties, including some victims. One aspect of the mess sticks out so loudly that even this magazine ended with a partisan antitort gratuitious "ha ha" send off.

Dr. William Logan, M.A.G. President, got both ink and pan-partisan cheers when he proclaimed "We're no different," and must pay for our legitimate mistakes by due legal process. Others repeatedly doled out the "but" part of Dr. Logans thrust, with facts and figures showing that malpractice premiums, the bills from defensive medicine, and cutbacks in services (like obstetrics) was dramatically changed and changing in Georgia and the nation . . . that over 70 businesses had joined the tort reform coalition because of rising costs . . . that Georgia sheriffs had recently had their day, followed by the Mayors of Georgia, for things as far reaching as cancellation of a Christmas parade in a small Georgia town.

"The media noted the halls were caught in a gridlock not seen in years — called catching and lobbying your elected representatives."

Smatters of applause. The largest thunderclap and hollers (from only one side) came from the downhome electric of Lt. Gov. Zell Miller's punch line: Support Bill 434 (loser pays) if you want to see frivolous lawsuits go away in Georgia. "I know what you mean," joined in a University of Georgia history professor I bumped into. "As Chairman of the Girl Scout cookie sale, we had to cancel this year." Suddenly "malpractice" in a litigious society is as virulent as A.I.D.S., but conveniently condensed by the Atlanta papers — the doctors verses the lawyers. . ." *"Take this message to my brother; you can find him EVERYWHERE."*

Then several thousand broke into many dozens as they entered the massive spaces of our political Vatican to engage in a sweaty nose-to-nose exercise in democracy that would make Jefferson smile and certainly cause Twain to chuckle. The media noted the halls were caught in a gridlock not seen in years — called catching and lobbying your elected representatives.

To catch one or more, you page them from the floor, which novices like me (which is to say, us) learned is a compliment and not the logical nuisance it might seem. "There goes one!" Then only because of no other apparent logistical alternatives, you surround them one at a time in tight little gangles dripping with body heat. Like any other members of the human race, it is very counter productive to thump one or more on the chest — particularly the women representatives. However, raised fingers and earnest tones are within the accepted rules of the game. Even occasional outrage is acceptable, as I'm sure they daily toil in a world of outrageous things even as you and I. "Yeh, uh, Bill so-and-so, subcommittee, we'll see, hmm, and let's keep in touch" make up most of the fractious "diaglogue" — obviously why letters and personal contact before, during, and after are when the English language is resorted to. It's your body and *concern* which counts for the fleeting — but important — moment. My professor friend (a fellow member in the "Friends of Oglethorpe") was there taking photos of Democracy in Action for a new book of his on political science. On the day he happened to drift over from Athens he got them, in spades. My deodorant broke down in five such sessions. Four of them, including one with a first-time lawyer legislator, renewed my faith in this process of give-and-take toward common solutions. The fifth, with a lawyer legislator who is tall, dark, and handsome, was marked by an almost laughable air of drop dead preconception. Nobody laughed. . . *"I ain't blind, and I don't like what I* think *I see,"* To repeat, I was 80% affirmed that as per usual most politicians are doing their confused and confusing best most of the time; "best" as defined as no worse than you or I, assuming you or I had the "umph" to pass through the ring of fire to get there.

"Like any other members of the human race, it is very counter productive to thump one or more on the chest — particularly the women representatives."

And then there's Speaker of the House Tom Murphy, snortin', stompin' and steam rollin'. Ask the media or many Rotary clubs how he has avowed (i.e., bragged) how no such legislation will dare escape from beneath his lead foot. Probably to the detriment of his blood pressure, bits and pieces already have. My gut tells me he isn't going to shout down young lawyer Pete Robinson from Columbus. He's already raising enough tort reform hay (Bills 1184, 1185, 1186) to sound like ten. Tell it all — brother! In viewing his bravura firsthand, I am reminded of the insight of another good ol' boy from my home state, Andy Jackson. . . . "One man with courage can make a majority." Surely his courage must be costly among his fellow lawyers, which by definition is to say a lot of his legislative colleagues. In a reverse spin on gamesmanship, I hope Murphy keeps it up. It will hasten that day when moldly old platitudes about the arrogance of power, pride that precedith a fall, some of the people all of the time *et al,* come true. After this last decade, doctors should know a thing or two

“Surely this beats the mumbled, self-serving, backbiting whines that pass for constructive thought in the shadows of a typical doctor’s lounge.”

about the high cost of arrogance. Was the poetry of Robert Frost describing “Mending Walls” or freedom. . . “Something there is that doesn’t love a wall. That wants it down.”

“. . . *Pretty soon the time* will *tell*”

I had six up-close jousts with trial lawyers over a day and night, two of them Savannah friends (please notify the A.M.A. computer that most of my personal friends are lawyers). Since liquor brings out the best in me, my best body blows were thrown in the Hyatt-Regency bar . . . oh . . . things like 30-60% contingency fees, leaving the victims as little as 25% after “their” expenses . . . things like pain and suffering “sympathetically” dwarfing the real damage settlement . . . things like that, so to speak. Such blows hit a pillow, as a friendly (if facile) wave of the hand invariably pointed like a solicitous Christmas Future toward “our” mutual culprit — the one not at the bar — those sandbagging insurance boys.

The following phenomenom may or may not create or magnify this present crisis: Enormous profits from enormous premiums are shifted to enormous offsetting “reserves” against spiraling significant cost of settlements — and then hyped into an uncrisis. The bottom line then is near impoverishment, requiring ever more premium to keep the pump pumping . . . or shut down (see, we told you it was a crisis). However, some companies might be only one arm of Octopus Mutual, with the other seven arms still dabbling quite fatly in pieces of cake like the Whole Life Insurance fantasia, that you or I often bought for a free lunch as a graduate student. Did not the American oil companies just get nailed for similar creative dabbling during the “Arabian” oil crisis? It cost them many millions in penalties and zillions in lost public trust.

Perhaps seemingly straight American types will wind up on the cross dying for everyone’s sins — summed up as “Big Business” in the current flood of trial lawyer-sponsored pro tort ads on T.V., replete with huge paunches, giant cigars and cruel knowing winks, as crewcut blond Arians wearing uniforms with arm bands slam the door of justice on the actor in the wheel chair. Maybe Big Business should share a lash or two, which still leaves *completely* unaccounted: what about the Prime Mover Arabs? Certainly the A.B.A. is uninterested in curbing self-excesses, or even giving their “fair share” toward a common solution. They just turned down the A.M.A.’s request to consider at least some tort reforms. As Casey Stengel advised, “You can look it up” in any national news source. The February 24th issue of *Time* ends its article on the problem thus: “The bitterness between the two professions by now is deeply felt, and lawyers in particular may feel they have little need to bend since they benefit from the status quo. But if attorneys decline to compromise, they could find reforms, even the least palatable ones, imposed on them.”

“There’s something about being shot at dawn that tends to enhance one’s concentration. . . .”

I got my ammo sheet to blow up the insurance business from a smiling young lawyer in the Capitol rotunda. He was standing in front of giant color blow ups of mutilated bodies and parts of same. Nothing personal, you understand, — “*and justice for all.*” My boozy smile was gone. Time to sober up . . . surely not all of the people all of the time. “*Take THIS message to my brother.*”

Sheriffs, mayors, firemen, municipalities, businesses, Girl Scout cookies, Christmas parades, cancelled new products, vaccines, and school sports programs, closed recreational and day care centers, insurance companies, doctors, lawyers — and now even the State of Georgia (see **Divine Provi-**

dence Footnote below) . . . the "issue" boiled down in the lawyers ads as the doctors and fat cats lobbying to be above the law. According to *Newsweek,* in 9 years the number of product liability cases has risen 10-fold, and the amount of jury awards has tripled.

If it were that simpleminded — and it is not — we stand no chance with the legislators, i.e. lawyers. If we permit or even self-paint ourselves into our familiar corner, we will wind up the same old targets — fat, slow and stupid like the buffalo. If we dare charge alone like a wounded buffalo, we will be shot between the eyes.

I'm sure like most who showed up, I am asked, "Did it do any good?" Yes and no, leading to maybe. I say *probably,* if you look at the legislative score card at the end of the article. It reflects hope, progress, and achievement, along with disappointments if you note most incisor teeth knocked out. Please look at it, and do something accordingly. Please do it worthily.

Oh, yes, we did a universe of good. On one sunny morning, several thousand showed up to take the firm high road in democracy. Surely this beats the mumbled, self-serving, back-biting whinings that passes for constructive thought in the shadows of a typical doctor's lounge. Boys and girls, we are all together in this one. Much more importantly, we are not alone in what is truly a coalition, our singular trump card in politics. Please play it.

Uncharacteristically, we participated as a finally breathing American citizen, listening to the whine of bullets (plus thuds) and suddenly with the opportunity to fire back in the give and take of our uniquely democratic mixmaster. As someone once said, there's something about being shot at dawn that tends to enhance one's concentration. Our otherwise worthy opponents were quite unworthy in round one, doubtless counting on a one round knockout. Judging from the level of the lawyer's T.V. ads, surely the "Common Man" is not as common or stupid as the lawyers are counting on ultimately.

Our last speaker before *takin' it to the streets* reminded us soberly about battles, war, and crisis. He went to Webster's to define its true nature. I personally prefer corny old history. These words were one week off a Philadelphia press, when Washington made them required reading for his few remaining frozen thousand. They were even hand written on drum heads. "Something" made them all get into long boats and cross the ice-clogged Delaware River in the darkness of Christmas night. The surprise of timing was successful, to way the least. The timing in turn was simply necessitated by most enlistments being up a week later . . . but "somehow" not many people went back home.

> *"These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this* crisis, *shrink from the services of his country;* but he that stands it now *deserves the love and thanks of man and woman.* Tyranny, *like Hell, is not easily conquered; yet we have this* consolation *with us, that the harder the conflict, the more glorious the triumph."*
>
> *Thomas Paine,*
> *"The American Crisis," 1776*

Legislative Scorecard

Bill 1186 — General Tort Reform: An amended, watered-down bill that passed by the House, was altered by the Senate Judiciary subcommittee and Committee, was substituted on the Senate Floor, and put into a conference committee; however, it was never voted on due to an unusually early adjournment by the Legislature. "I do not know what happened," Murphy was quoted the next morning, apparently with a straight face. Gov. Harris said he had never seen such a development in his political career.

Bill 1184 — Attorney continency fees: Would set maximum amounts a plaintiff's lawyer can charge on a contingency fee basis, a practice that is illegal in England in any form. This was never voted on by the House Judiciary subcommittee. Good intelligence has it that the Trial Lawyers Assoc. is already raising thousands of dollars to back anyone to run against lawyer-legislator Pete Robinson of Columbus. He authored Bills 1184, 1185, and 1186, and well deserves support for another try, along with many new non-barrister friends.

Bill 1185 — Dismiss and refile bill: This bill states that the plaintiff cannot dismiss the case after they have presented their argument. Current law permits plaintiff to dismiss anytime up to the time the jury begins its deliberations. The bill passed.

House Bill 1143 — Frivolous law suits: Loser pays "reasonable" attorney fees and court costs. This passed.

Divine Providence Footnote

Jan Kemp wins whopping $2.5 million suit against UGA, apparently for real damages, but with over two-thirds being for punitive pain and suffering. All sides are stunned . . . "beyond my wildest dreams," she says; *"primarily* I was interested in widespread therapeutic reforms."

"I fainted," said Governor Harris.

"My God, I hope they appeal the decision," shrieks Tom Murphy.

"My God, by next morning, the State of Georgia goes into front page shock because it doesn't have enough malpractice insurance. Miss Kemp's lawyers are photographically sipping champagne. Several days later, she and her lawyers begin shifting through book and movie contracts, according to the morning news. Good for her, I suppose, except, *My God,* one week later the Savannah front page explains, *"Tybee's Funding Cut Out . . .* as legislators scrambled to find additional cash to cover the $2.5 million jury award to Jan Kemp." End quote.

Oh, what tangled webs we weave . . . Tom, I've got both an extra blue button *(Support Civil Justice Reform)* plus a *Justice For All* one. Let's you and me wear them both, together. ■



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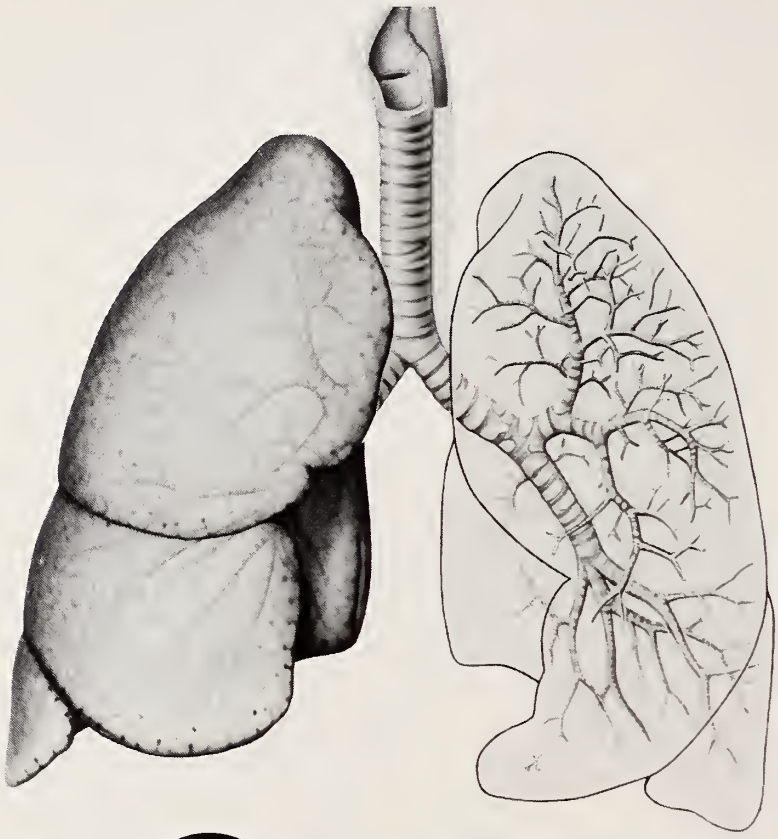
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Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest®, tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy — *Pregnancy Category B* — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[0617B2R]

Note: Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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AUTOMOBILE PASSENGER DEATHS IN CHILDREN LESS THAN FIVE YEARS OF AGE

RANDY HANZLICK, M.D., WAYNE ROSS, M.D.

Data from Fulton County, Georgia, from 1975-1984 are presented.

Introduction

RECENT PASSAGE of Georgia legislation has made mandatory the use of automobile child restraints for children 4 years of age and below, effective as of July, 1984. A study in Tennessee, where child seat legislation has been in effect since 1978, reports that childhood traffic fatalities declined more than 50% since enactment of the legislation.[1] This article discusses what numerical effect similar legislation in Georgia may have on reducing childhood traffic fatalities in Fulton County. Characteristics of childhood traffic fatality incidents are also described in an attempt to determine additional factors which may be important to child passenger safety.

Methods

Medical Examiner and available police traffic reports were reviewed on all traffic incidents which occurred between 1975 and 1984 in Fulton County and resulted in the death of a child passenger 5 years of age or less. Basic demographics, accident type, vehicle information, and circumstantial information were reviewed and tabulated.

Results and Discussion

Table 1 displays the yearly number of traffic incidents and deaths relating to childhood passengers. Eighteen such deaths occurred during the 10-year period and resulted from 15 separate incidents. The maximum number of incidents and deaths in a given year was five, with a mean of 1.5 incidents and 1.8 deaths per year. Childhood traffic fatalities accounted for less than 2% of all traffic-related fatalities in the county, and less than 0.1% of all deaths reported to the Medical Examiner.

Age ranged from 2 weeks to 5 years, with a median age of 11 months. The majority were 1 year old or less, and only one of 18 victims was between 2 and 4 years of age; seven were age 4 or 5 (Table 2). Thus, children at the extremes of the age range were more at risk than those in the middle. Males and females were about equally represented. Sixteen of 18 victims were black (88%); black children were slightly over-represented compared to their 70% prevalence in the general population of this age range.[2] Four black children were killed in one incident, probably accounting for the apparent over-representation of blacks.

Table 3 illustrates the type of accident involved in each incident. Collisions with other vehicles occurred in 11 of 15 incidents, while four incidents involved single cars. Interestingly, in over half of the incidents involving two vehicles, the impact was to the right side of the victim's vehicle (the area where restraint seats are often placed). In one case, the incident was related to a child restraint; the mother lost control of the car when she attempted to retrieve a child who had fallen out of a restraint seat (it was not determined whether the restraint seat had been used properly).

Table 4 indicates that in cases where data were available, the majority of childhood victims were in the front seat. Only three victims were reportedly in child restraints at the time of the accident, two were not in restraints, and the majority (7) had restraint device status listed as "unknown" on the traffic report. In three cases, traffic reports were unavailable. If meaningful long-term study of restraint device efficacy is to be accomplished, investigating officers will

From the Office of the Medical Examiner, Fulton County Dept. of Pathology and Laboratory Medicine, Emory Univ. School of Medicine. Send reprint requests to Dr. Hanzlick, 50 Coca Cola Place, Atlanta, GA 30303.

Table 1 — Number of traffic deaths and traffic incidents per year involving children 5 years of age and under who were occupants of vehicles, Fulton County.

Year	*Number of Deaths*	*Number of Incidents*
1975	1	1
1976	0	0
1977	5	5
1978	5*	2
1979	1	1
1980	3	3
1981	0	0
1982	0	0
1983	2	2
1984	1	1
TOTAL	18	15
Mean	1.8	1.5

* Four deaths in one incident.

Table 2 — Demographics of 18 children passengers who were killed in traffic accidents during a 10 year period, Fulton County.

RACE	16 Black	2 White
SEX	10 Male	8 Female
AGE RANGE	2 weeks to 5 years	
MEAN RANGE	2 years	
MEDIAN RANGE	11 months	
AGE DISTRIBUTION:		
1 year old or less	10	
2 or 3 years old	1	
4 years old	2	
5 years old	5	

Table 3 — Type of collisions involved in 15 traffic accidents which killed 18 children ages 5 years or less during a 10 year period, Fulton County.

COLLISION WITH ANOTHER VEHICLE		11
Victim's car with frontal impact	3	
Victim's car with right side impact	6	
Other	2	
COLLISION WITH OBJECT OR LOST CONTROL		3
Hit tree	1	
Hit pole	1	
Lost Control*	1	
SUDDEN STOP; CHILD THROWN FORWARD		1
TOTAL INCIDENTS		15

* Mother lost control trying to retrieve child who had fallen out of car seat.

have to be more thorough not only in determining whether a restraint device was used, but also its type, position in the vehicle, and whether it was used properly. The Governor's Office of Highway Safety is currently considering the development of a special reporting system for children injured or killed in vehicular accidents, but currently, no such mechanism exists in Georgia.

Table 5 summarizes the vehicles involved in 11, two-vehicle incidents. In nearly every case, the victim's vehicle was smaller or lighter than the other vehicle involved in the collision. Victims' cars were foreign-made in four of 11 incidents, while the "other" vehicles were all domestic models. The victim's vehicle was a car in every case; four of the "other" vehicles were trucks and one was an ambulance. As Table 6 illustrates, the driver of the victim's car was responsible for the accident in 11 of 15 total incidents. It is tempting to speculate that the presence of a child passenger may serve as a "distractor." However, the finding that the driver of the fatally injured child's car was responsible for 11 of 15 incidents (73%) is quite consistent with the finding that in Fulton County, irrespective of age, about 62% of all traffic fatality victims were in the car which caused the accident.

Nearly half of the incidents occurred within City of Atlanta, one-third in unincorporated Fulton County, and the remainder in smaller police jurisdictions within the county. The impacts were severe enough to injure persons other than the victim (usually adults) in 13 of 15 incidents, and severe enough to kill other persons (usually adults) in one-third of the incidents. In the child victims, the lethal trauma was primarily to the head and neck in nine cases, and generalized internal injury in nine cases. The relatively high incidence of simultaneous adult injury and death, the fact that impact was to the right side of the vehicle in six of 15 incidents (restraint seats are designed primarily to protect against longitudinal forces and are often placed on the right side of the vehicle), and the fact

that three of the child victims were reportedly in child restraints at the time of the accident all serve to suggest that the impacts were severe enough to overcome the potential protective effects of restraint devices. By no means do our data prove such an assertion, but such observations certainly warrant further study.

Finally, four incidents occurred on interstate systems, five incidents occurred at intersections, the majority occurred in daylight conditions, and only one incident was attributed to adverse weather conditions.

Table 4 — Child passenger location and restraint device status in 15 fatal traffic accidents which involved children age 5 years or less, Fulton County.

RIGHT FRONT	5 incidents
OTHER FRONT	3 incidents
BACK SEAT	3 incidents
UNKNOWN	4 incidents
USING CHILD RESTRAINT	3 incidents
NO RESTRAINT	2 incidents
NO TRAFFIC REPORT	3 incidents
RESTRAINT STATUS LISTED AS UNKNOWN	7 incidents

Table 5 — Vehicles involved in 11, two-car collisions which killed children 5 years old or less, Fulton County*

VICTIMS VEHICLE		*OTHER VEHICLE*	
Datsun		Plymouth	
Chevelle		Chevy C10 Truck	
Ford Pinto		Chevy Corvette	
Chevy Impala		Dodge Ambulance	
Toyota		Plymouth Barracuda	
Toyota		Chevy Station Wagon	
Car model unspecified		Truck; type unspecified	
Ford Galaxy		Buick Regal	
Chevy Wagon		Cadillac	
Ford Mustang		Jeep CJ5	
Toyota		Ford Truck	
Foreign	4	Foreign	0
Domestic	6	Domestic	10
Unknown	1	Unknown	1

* In nearly every case, the victim's car was smaller or lighter than the other vehicle.

Conclusions

In Fulton County, childhood traffic fatalities were rare during the years 1975 to 1984, and there was a very low risk for children 2 or 3 years of age. A predominance of blacks was probably related to the demographics of the child population. If child restraints were 100% effective in reducing childhood traffic fatalities, about two more lives per year would be saved over and above present levels in Fulton County. The rarity of such incidents requires that restraint device efficacy studies be done on much larger geographical scales.

The driver of the victim's car was responsible for the accident in about three-fourths of cases. Darkness and weather conditions were not significant factors. The data suggest that the location and direction of the impact site, the degree of impact force, and the size or weight of the victim's vehicle were significant factors in causing death, irrespective of the presence or absence of child restraints.

Investigative agencies must take steps to insure complete investigation of childhood traffic fatalities. Specific reports must be made which will reduce the number of cases in which restraint device information is listed as "unknown." Such reports should indicate the type of restraint, its location in the vehicle, and whether it was used properly. Such recommendations have been made to the Governor's Office of Highway Safety. Further, Medical Examiners must fully and accurately determine the nature of fatal injuries. Only then can data be obtained which will enable reasonable design improvement strategies as well as reliable efficacy studies.

Child restraints were not without hazard. At least one death has been related to a driver losing control when trying to retrieve a child who fell from a car seat (possibly used improperly). When used, child restraints must be used properly to be effective.

Finally, because of the relatively small number of children killed in traffic fatalities, it would seem reasonable to design prospective efficacy studies which investigate nonlethal injury as opposed to fatalities. Nationwide, child passengers are reportedly injured about 75 times as often as they are killed.[3] Our effort should be concentrated to reduce injury which results in lifetime disability, with fatal injury assuming secondary import. The reader is referred to the recent papers by Weston and Levi[3] and Decker *et al*[1] for further insights into the topic.

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HORSESHOE KIDNEY ASSOCIATED WITH AORTIC ANEURYSM

MARK J. COSTANTINO, M.D., THOMAS A. MONTGOMERY, M.D.

A report of 4 cases in a community hospital and a review.

Abstract

Four patients with the combination of abdominal aortic aneurysm and horseshoe kidney were treated during a 24-month period in a community hospital. Three patients underwent elective resections with one postoperative death. One patient presented with a ruptured aneurysm and died postoperatively of pulmonary failure. These patients are discussed in detail, and the world literature is reviewed. Emphasis is placed on preoperative evaluation including the use of aortography and CT scanning. Surgical technique is described, including management of the renal arteries and the renal symphysis.

HORSESHOE KIDNEYS are a common renal anomaly occurring in 1 of 400 to 1800 patients.[1] The coincidental association of aortic aneurysms with horseshoe kidneys is less frequently encountered. Crawford[2] reported only six cases in over 1100 aneurysms seen by their group over a 27-year period. A review of the problem was presented by Bietz and Merendino[3] in 1974 who reported two cases of their own and reviewed 32 cases found in an extensive review of the world literature. Connelly *et al*[4] in 1980 reported six cases of horseshoe kidneys with associated aneurysmal or occlusive disease of the aorta (four with aneurysms and two with occlusive disease). They also reviewed 70 cases from the world literature, including 56 aneurysms and 14 with occlusive disease. Undoubtedly, many cases go unreported, and a report of patients with this combination treated in a community hospital is lacking. We wish to present our experience with four cases operated on in a community hospital during a 24-month period. The cases will be presented and a general review of the problem given.

Case Reports

Case 1. AW, a 66-year-old white male, has an asymptomatic 7.5 cm abdominal aortic aneurysm. Past history included hypertension and smoking. A CT scan revealed a horseshoe kidney which was confirmed by aortography. The renal vasculature appeared normal. Aneurysmectomy was performed without incident replacing the aneurysm with a 22 mm woven bifurcation graft. The kidney was managed by simple elevation of the isthmus with division of one accessory renal artery to the isthmus which appeared nonfunctional. Postoperative course was unremarkable. Blood pressure and renal function remained unchanged.

Case 2. RL, a 56-year-old white male, had a 5 cm asymptomatic abdominal aortic aneurysm. The patient also had symptomatic aortoiliac occlusive disease with progressive claudication. An aortogram was obtained but was of poor quality, and the horseshoe kidney was not recognized. The horseshoe kidney was recognized at surgery, and a subsequent meticulous dissection was required to identify the renal arteries which were positioned normally. The horseshoe kidney was managed by dividing the isthmus in the midline. An aortobifemoral bifurcation graft was inserted, and the postoperative course was unremarkable.

Case 3. HH, a 76-year-old white male, had an 8 cm abdominal aortic aneurysm and had complained of vague abdominal pain for 1 month which had prompted his admission to the hospital. His history included chronic obstructive pulmonary disease and hypertension. He also had borderline renal function with slight elevation of his BUN and creatinine.

Dr. Costantino is with the Department of Vascular Surgery, Athens General Hospital, 1199 Prince Ave., Athens, GA 30613.

A CT scan revealed a horseshoe kidney. An aortogram was obtained, including selective renal arteriograms, revealing normal renal vasculature. Surgery was performed without incident, replacing the aneurysm with a bifurcation graft and dividing the renal isthmus. There was no hypotension, though blood loss was 2000 cc replaced completely by autotransfusion. The postoperative course was complicated by progressive renal failure, pulmonary failure, sepsis, and gastrointestinal bleeding. The patient died on the 20th postoperative day. The etiology of the progressive renal failure was not determined.

“The key to the successful management of these patients is the preoperative diagnosis and accurate arteriography.”

Case 4. EP, a 65-year-old white male, presented to the emergency room of Athens General Hospital with a 1-hour history of severe abdominal pain, nausea, and near syncope. History was unremarkable. Physical exam revealed a pale, diaphoretic man in obvious distress. His pulse was weak, and his blood pressure was not audible. A large pulsatile mass was palpated in his abdomen. The patient was taken immediately to the operating room with a diagnosis of a reptured aortic aneurysm. At exploration, a large retroperitoneal hematoma was found. After proximal aortic control was obtained, the hematoma was opened exposing 10 cm aortic aneurysm with an anterior perforation. Identification and control of the neck of the aneurysm was difficult, and it soon became apparent that the patient had horseshoe kidney. The symphysis of the kidney was elevated and resection of the aneurysm completed utilizing a 24 mm woven tube graft. The renal arteries were not identified but did not originate from the aneurysm. The postoperative course was stormy with renal failure and severe adult respiratory distress syndrome. He died four days after surgery of progressive pulmonary failure.

An additional patient with aortoiliac occlusive disease and a horseshoe kidney has been identified but has not undergone surgery at this time.

Discussion

The embroylogy of the horseshoe kidney is fairly well explained by the early fusion of the renal blastemas at the 4 to 8-week stage. This prevents the normal ascent and rotation of the kidneys. In general, the horseshoe kidney is held below the inferior mesenteric artery with the collecting system anterior and the ureters medial. This may be complicated by ureteral anomalies and urinary stasis.[1] Surprisingly, few horseshoe kidneys are symptomatic. Symptoms are usually pain and are secondary to obstuction with infection or stone disease. The average age of the patient at diagnosis is 35 years. Again, the diagnosis is usually prompted by the ureteral anomalies with obstruction or stone disease. Hypertension is unusual.

The presence of a horseshoe kidney is generally determined radiographically. The intravenous urogram is usually diagnostic and should be obtained on all patients with aneurysms unless an aortogram is planned. CT scanning has proven useful in evaluating aneurysms and diagnosing a horseshoe kidney. Two of our cases were dignosed by CT scanning while studying “routine” aneurysms preoperatively. Aortography is diagnostic and is indicated in any aneurysm in which there is any suspicion of a horseshoe kidney. Indeed, many authorities recommend routine aortography for all elective aneurysms.[6] We, however, have taken a different approach, using aortography selectively in patients with concomitant occlusive disease, hypertension, or the suspicion of a suprarenal aneurysm only. We do routinely obtain CT scans on patients with aneurysms unless aortography is planned.

The surgical management of the horseshoe kidney during aneurysmectomy may be very challenging. The two obvious problems encountered are an anomalous blood supply and the division of the renal isthmus (symphysiotomy). The key to the successful management of these patients is the preoperative diagnosis and accurate arteriography. The anomalous blood supply to the horseshoe kidney has been well described.[7, 8]

“Surprisingly, few horseshoe kidneys are symptomatic. Diagnosis is usually prompted by the ureteral anomalies with obstruction or stone disease.”

The number of renal arteries can range from 1 to 10, with 53% having at least one accessory artery. Sixty percent of all patients have at least one anomalous artery. Arteries arising from the aneurysm are usually managed by reimplantation but may be ligated if small and apparently insignificant. A useful technique for reimplanting renal arteries has been to excise a button of aortic wall containing the vessel orifice and anastomosing this button to the graft. Prior to ligating a renal artery, the artery should be temporarily occluded while observing the renal parenchyma for blanching. Occasionally, the renal vasculature can be so complex, with multiple small vessels arising from the aneurysm, that resection of the aneurysm may not be advisable. Intraoperative arteriography has been described when the horseshoe kidney has not been diagnosed preoperatively.[9] However, in our second case, we

were able to define the renal vasculature by careful surgical dissection. The renal veins are highly variable and must be carefully identified.

"The presence of horseshoe kidney in association with ruptured aortic aneurysm remains a difficult problem."

The second major problem encountered is the division of the renal isthmus. This was necessary in 30% of the cases reviewed by Connelly[4] and in two of our cases. Frequently, the isthmus can simply be dissected off of the anterior wall of the aneurysm and elevated, giving very adequate exposure. If the isthmus has to be divided, this can be done safely if careful attention is given to the renal collecting system. If injury occurs and is recognized, it can be safely repaired but requires meticulous dissection. Overall, the mortality reported in the world literature for this procedure has been less than 5%.[4] However, the combination of ruptured aortic aneurysm and horseshoe kidney has been especially lethal.[10]

Conclusion

The combination of the abdominal aortic aneurysms and horseshoe kidneys is rare but is occasionally encountered in an active vascular practice in a community hospital. These cases can be successfully managed if attention is paid to the preoperative diagnosis and if meticulous surgical technique is used during the procedure. The presence of horseshoe kidney in association with ruptured aortic aneurysm remains a difficult problem.

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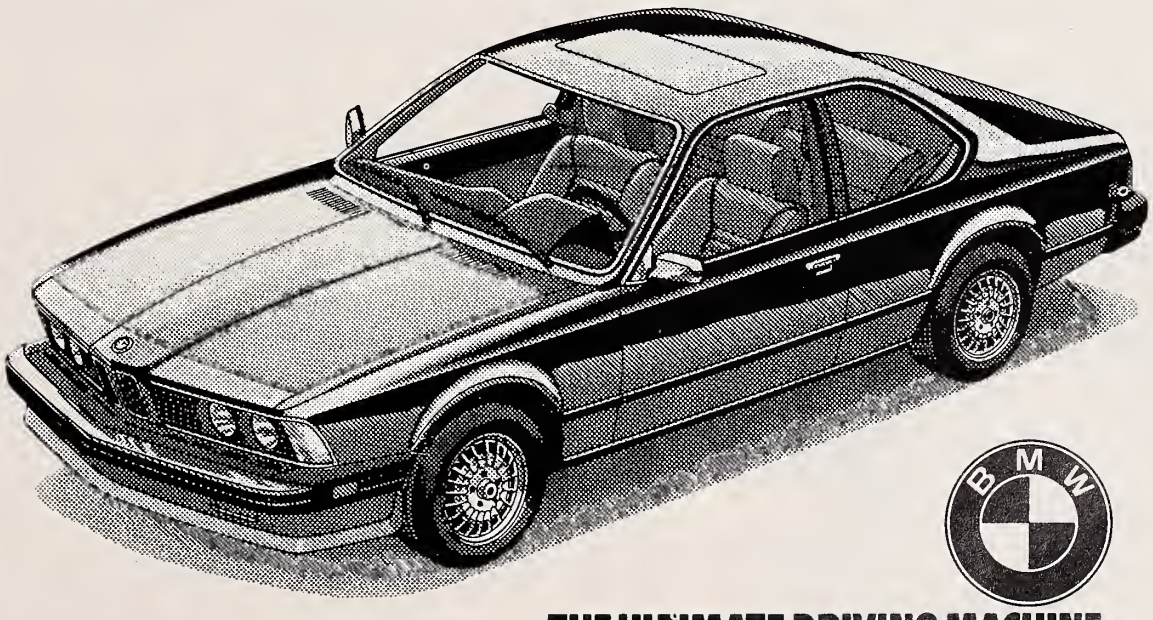
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Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of Dyrenium (triamterene, SK&F CO.) and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

Thiazides may add to or potentiate the action of other antihypertensive drugs.

Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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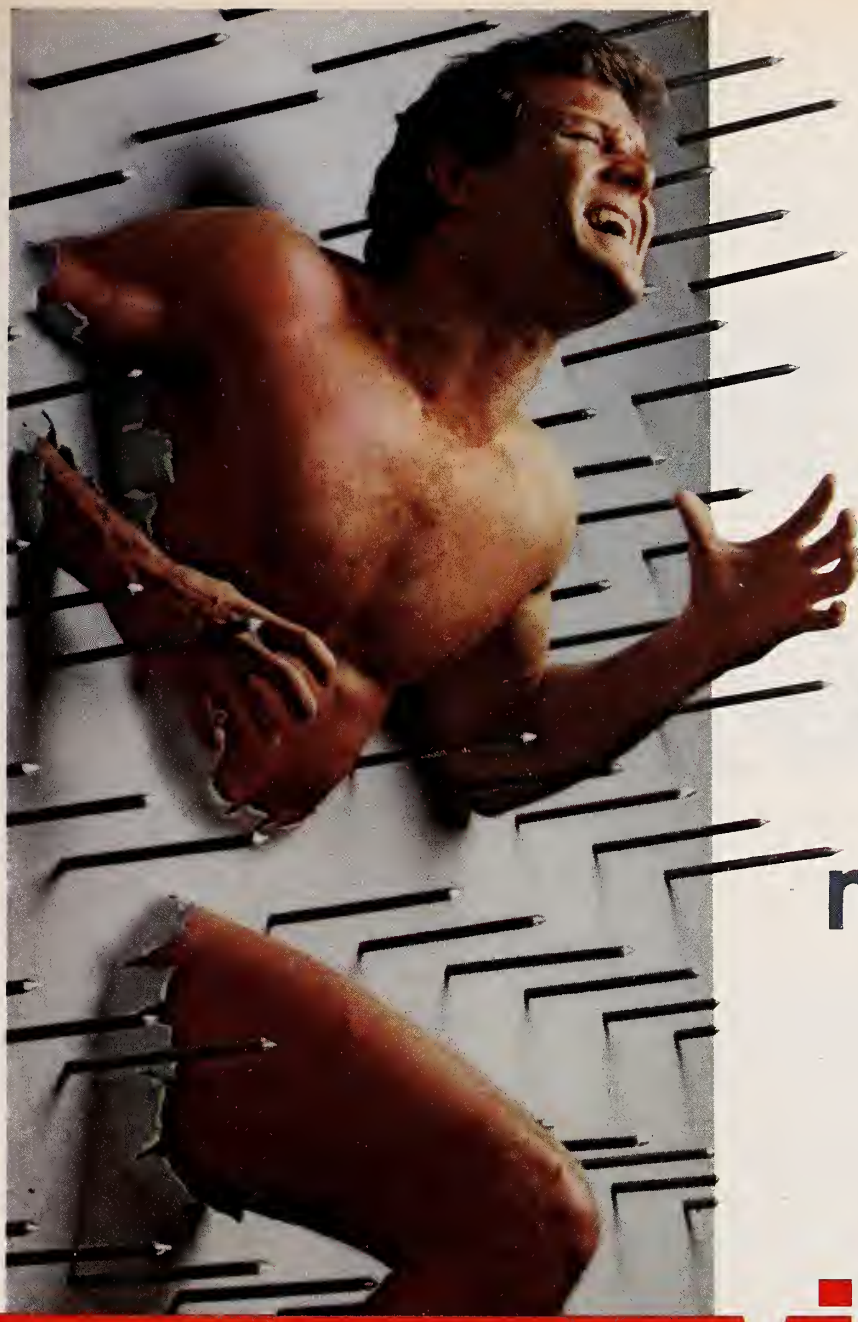


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Brief Summary

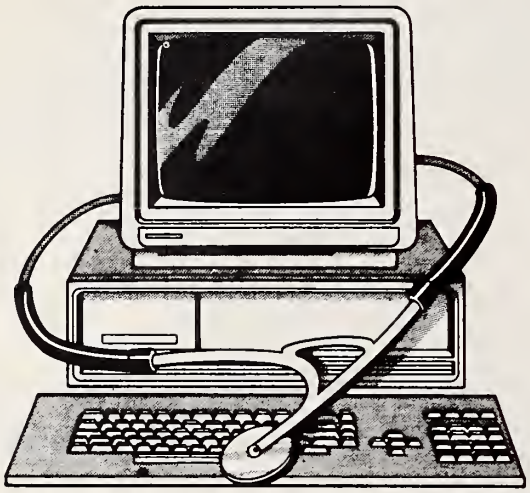
INDICATIONS AND USAGE: For the relief of moderate to moderately severe pain.
CONTRAINDICATIONS: Hypersensitivity to acetaminophen or hydrocodone.
WARNINGS
Drug Abuse and Dependence. VICODIN is subject to the Federal Controlled Substances Act (Schedule III). Psychic dependence, physical dependence and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN should be prescribed and administered with the same caution appropriate to the use of other oral-narcotic-containing medications.
Respiratory Depression: At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.
Head Injury and Increased Intracranial Pressure: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.
Acute Abdominal Conditions: The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.
PRECAUTIONS
Special Risk Patients: VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.
Information For Patients: VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.
Cough Reflex: Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.
Drug Interactions: The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.
Usage in Pregnancy: Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Nonteratogenic Effects: Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.
Labor and Delivery: Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.
Nursing Mothers: It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.
Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS
Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.
Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.
Genitourinary System: Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.
Respiratory Depression: (See WARNINGS.)
DOSAGE AND ADMINISTRATION: Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.
The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.
Revised, April 1982.

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SNORING AND OBSTRUCTIVE SLEEP APNEA

WILLIAM J. GRIST, M.D., CHARLES M. EPSTEIN, M.D., MICHAEL PICKFORD, M.D.

Pharyngopalatoplasty has produced good results in relieving these disorders.

Abstract

Snoring and obstructive sleep apnea are related manifestations in airway obstruction which occur during sleep. The obstruction can block the airway anywhere between the nares down to the hypopharynx. There is a set of symptoms associated with this syndrome that will lead the physician to a consideration of the differential diagnosis and the conclusive sleep apnea. Once the diagnosis of upper airway obstruction is reached, the primary treatment is surgical. The pharyngopalatoplasty, a relatively new operation, has produced good results in relieving both snoring and accompanying obstructive sleep apnea. Its success has obviated the need for tracheotomy in 50% of patients. These related disorders, more commonly diagnosed today, can be cured or significantly improved by pharyngopalatoplasty.

Snoring and obstructive sleep apnea are related manifestations of airway obstruction which occur during sleep. Snoring may, in itself, constitute the entire pathologic state or it may accompany true obstructive sleep apnea, a condition characterized by repeated episodes of nocturnal airway occlusion and consequent inadequate sleep. Both are more common in men than in women.[1-3]

Snoring is the sound produced by the vibration of the palate and the posterior tonsillar pillars as air flows through the pharynx. It usually occurs during sleep in a supine position and usually stops when the person is turned to a prone or lateral decubitus position. During sleep, the tone of the palatal, pharyngeal, and tongue muscles decreases, allowing these structures to fall back toward the posterior pharyngeal wall. As the aircolumn is narrowed, air velocity increases and vibrations of the palate and pharyngeal mucosa produce snoring.[4]

There are many other factors that can narrow the airway and increase the likelihood of snoring. These include large tonsils and adenoids and the configuration of the tongue and mandible.[1-3] Frequently, those persons most severely affected are obese, but obstructive sleep syndromes are definitely not limited to overweight individuals. Another important factor is the state of the nasal airway. If the nose is obstructed, breathing through the mouth further alters airflow characteristics which promote vibrations in the pharynx, and thus snoring is common in persons with nasal airway obstruction.

In the waking state, patency of the airway is maintained by the tone of the pharyngeal muscles which resist the tendency to collapse produced by inspiration. Obstructive sleep apnea occurs when the airway becomes totally obstructed as the pharyngeal, palatal, and tongue muscular tone decreases below that required to resist the collapsing forces predicated by Bernoulli's principle. Since continued obstruction is incompatible with life, the person will awaken enough to recover some of his muscular tone and restore his airway. This is usually followed by repetition of the cycle as the victim lapses into sleep and becomes obstructed again. During the course of a night's sleep, obstructive apnea may occur hundreds of times and the person awakens feeling as though he has not had much sleep, which is probably the case! Excessive daytime sleepiness is consequently the

From Emory University School of Medicine, Departments of Surgery (Otolaryngology) and Neurology, Atlanta. Send reprint requests to Dr. Grist, Emory Clinic, Otolaryngology Section, 1365 Clifton Rd., Atlanta, Ga 30322.

most common symptom of this disorder. Additional and equally serious manifestations include hypertension, morning headaches, arrythmias, and even cor pulmonale. Patients with active sleep apnea have great difficulty losing weight, though the reasons were unclear.

Mixed sleep apneas are episodes in which respiratory effort is absent for a portion of the apneic period, though obstruction eventually supervenes.[6] Symptoms and therapy are generally the same as in the pure obstructive syndrome. Purely central sleep apnea is much rarer than the other varieties and is less likely to be associated with snoring or excessive daytime sleepiness.

The diagnosis of obstructive sleep syndromes initially depends on history. In the case of snoring alone, the patient has usually been made aware of the problem by a member of his family who has been distrubed by obnoxious snoring. The complainant may be a disgruntled spouse who is threatening to move to a separate bedroom; or it may be a hunting or fishing buddy who refuses to go on an overnight outing anymore because of loss of sleep. This situation can have serious psychologic or marital consequences for the snorer and deserved serious consideration by the medical practitioner. Frequently, however, the patient is met by amusement or is dismissed as having a hopeless condition. For patients with sleep apnea, the presenting complaints are more ominous. Because of the hypersomnolence which accompanies this condition, most are unable to carry on a normal life. Many have faced loss of employment or have sustained injury while driving or operating some other piece of machinery. Usually a family member is able to confirm that the patient snores loudly while asleep and has periods of apnea which are alarmingly long.

Physical examination should note whether the patient is overweight. The nose should be examined for patency of the air passages and the patient asked about nasal congestion. The oral cavity exam should include careful observation of the palate, the tonsils, and the tonsillar pillars. Often, the posterior tonsillar pillars attach to the palate immeditely adjacent to the uvula. This particular arrangement creates the appearance of a broad based uvula but more importantly determines the transverse diameter of the nasopharyngeal inlet. The size of the tongue and the relationship to the posterior pharyngeal wall should be noted. Most patients with obstructive sleep apnea have a relatively shallow pharynx. Indirect laryngoscopy is usually unremarkable, showing a normal hypopharynx and larynx.[6]

“The differential diagnosis of obstructive sleep apnea includes the Pickwickian syndrome and narcolepsy.”

The differential dignosis of obstructive sleep apnea includes the Pickwickian syndrome and narcolepsy. The Pickwickian syndrome is alveolar hypoventilation with insensitivity to the PCO_2 associated with obesity. As mentioned earlier, many patients with obstructive sleep apnea are obese; but while awake they have no airway obstruction and do not have alveolar hypoventilation with hypercapnia. While obstructive apnea tends to appear in middle age, narcolepsy is characterized by a lifelong history of excessive daytime sleepiness and by the associated phenomena of cataplexy and sleep paralysis. At times, symptoms of obstructive apnea and narcolepsy may coincide; in such cases, treatment of the obstruction takes precedence.

The sleep laboratory contains facilities for monitoring the heart by ECG, brain activity by ECG, and airflow by spirometry. In addition, electromyography (EMG's) of the intercostal muscles and chest wall motion detectors can detect inspiratory effort which, if present in the absence of airflow, rules out central sleep apnea. Earlobe sensors monitor capillary blood oxygen saturation. Most sleep apnea patients can fall asleep easily despite these apparatuses.[6] The severity of the syndrome is estimated from the length and frequency of apneic periods, the degree of oxygen desaturation, and the presence of arrythmias. The diagnosis can usually be confirmed with a few hours of afternoon monitoring, but occasional patients with a mild or variable syndrome require overnight study (Figures 1 & 2).

Tricyclic antidepressants such as protriptylene are occasionally effective for obstructive sleep apnea, but until recently, tracheotomy was widely recommended for those patients who proved refractory. Most used the tracheotomy only at night, keeping it plugged during the day. This allowed them to speak and to function normally while awake. The results were extremely gratifying because these patients were generally much improved. Despite the unesthetic qualities of the tracheotomy, most were unwilling to do without it. Approximately 2 years ago, Hernandez *et al*,[5] reported 10 cases of obstructive sleep apnea treated by pharyngopalatoplasty. This procedure involves performing a tonsillectomy and then excising approximately one centimeter of the distal portion of the palate including the uvula (Figure 3). The most important portion of the procedure is to separate the anterior and posterior portions of the palate into two flaps. The point where the posterior pillar attaches to the palate is then retracted laterally and sutured to the anterior tonsillar pillar. The remainder of the palate and the upper half of the tonsillar fossae is also closed (Figure 4). The consequence of the procedure is to increase the transverse diameter of the nasopharyngeal inlet and to eliminate any redundant mucosa in the pharynx (Figure 5). Removal of the tonsils also creates more room in the pharynx, particularly if the tonsils are large. If the tonsils have already been re-

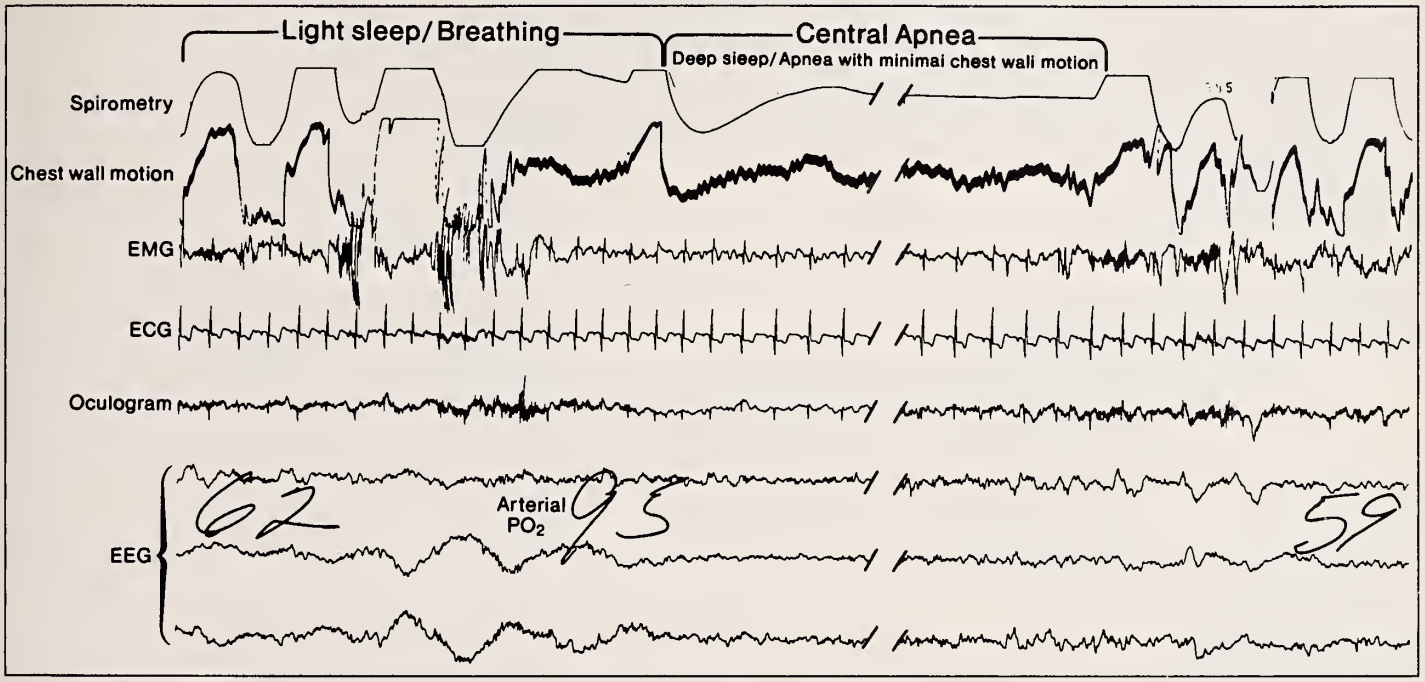


FIGURE 1 — Central sleep apnea. Notice the cessation of chest wall motion during the apnea episode.

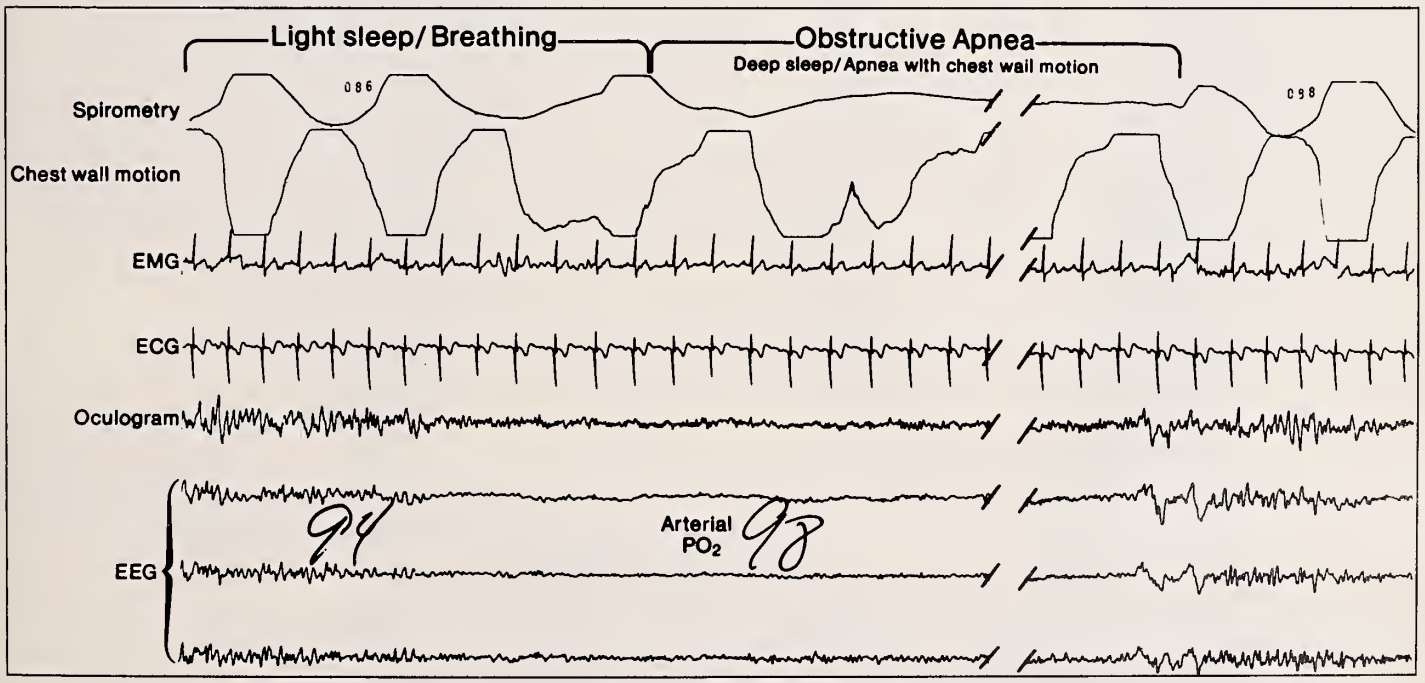


FIGURE 2 — Obstructive sleep apnea. Chest wall motion continues through the apnea period.

moved, then the tonsillar fossa mucosa is dissected free from the underlying musculature and excised. The rest of the procedure is then carried out as previously described.

Since this procedure hs appeared, we have not done any tracheotomies for obstructive sleep apnea, but we have performed 42 pharyngopalatoplasties. Two of these were in patients who had previously undergone tracheotomies. One of these patients has been decannulated, and the other continues to need his tracheotomy. All of the patients who have had this procedure believe themselves improved. They feel more refreshed in the morning and have less daytime somnolence. All of these patients have much less snoring than prior to surgery, and many of those who were overweight have been able to lose weight more easily. The disadvantages of the procedure are a very painful early postoperative course and the possibility that over-resection of the palate could produce palatal in-

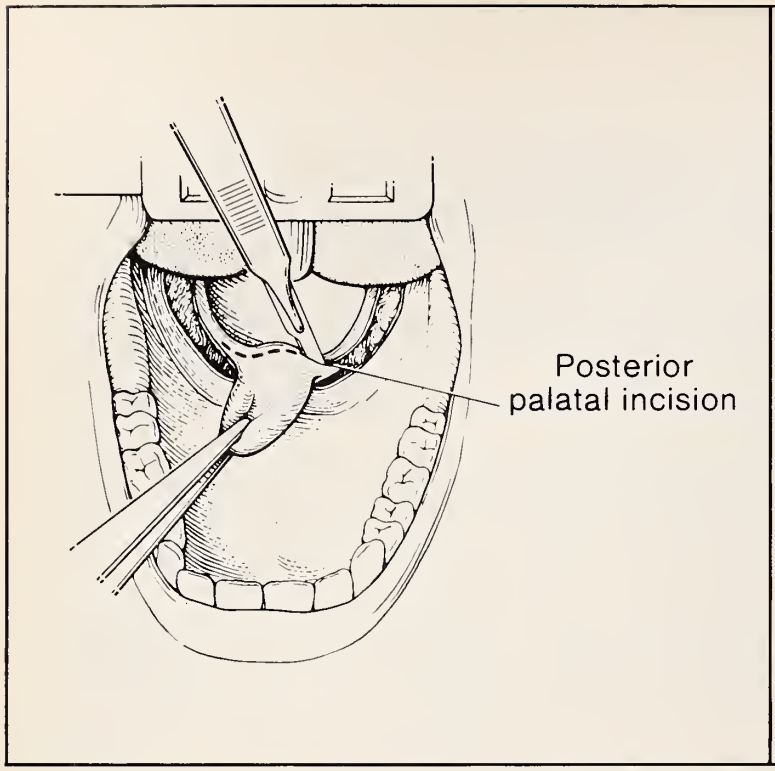


FIGURE 3 — Approximately 1 cm of the distal palate, including the uvula, is excised.

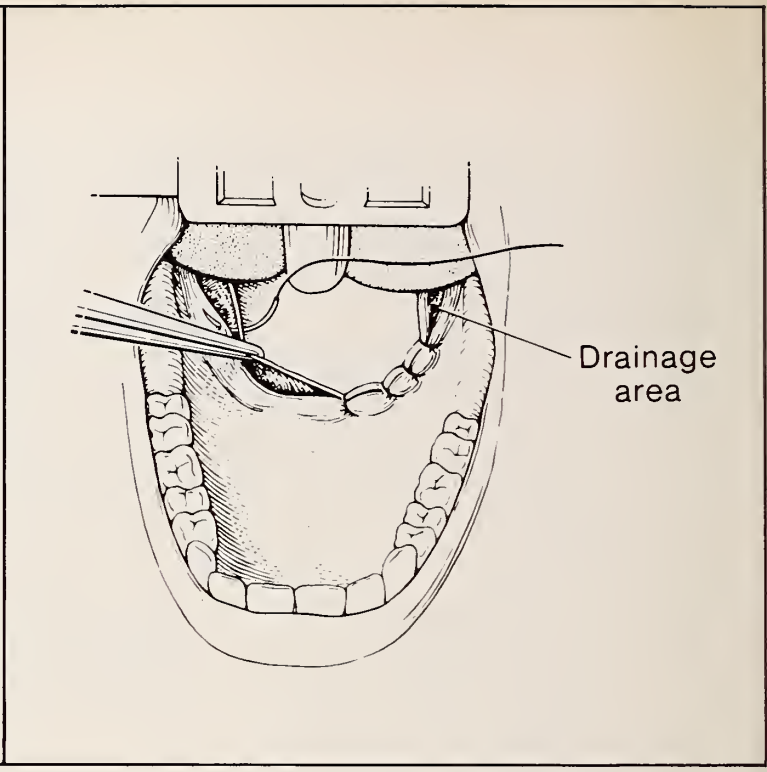


FIGURE 5 — The posterior tonsillar pillars are retracted laterally and sutured to the anterior pillars. This greatly enlarges the nasopharyngeal inlet.

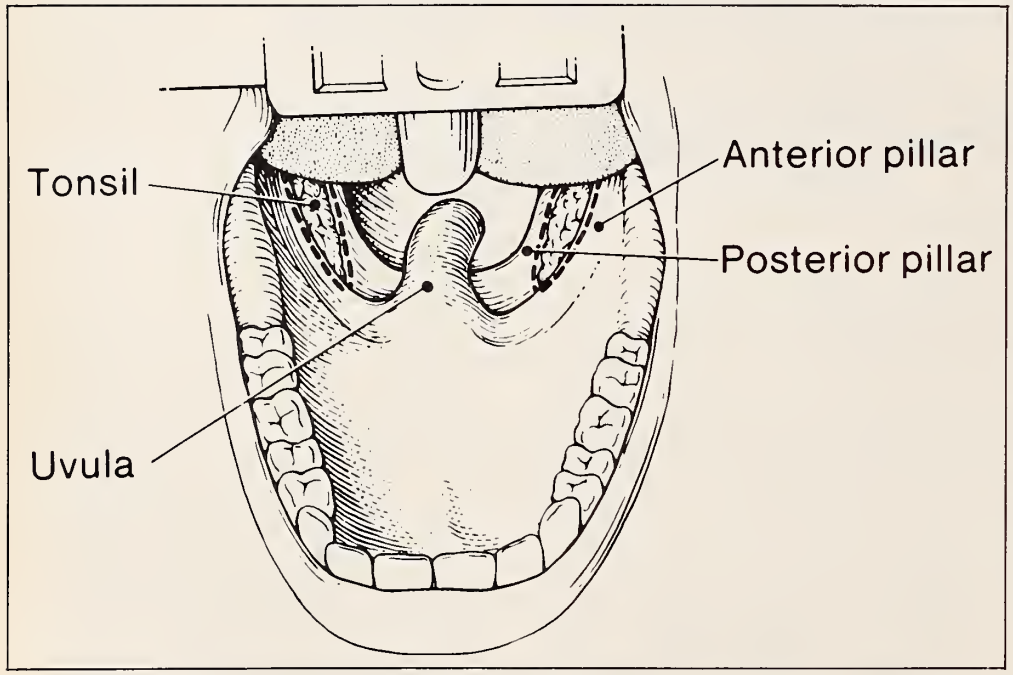


FIGURE 4 — The surgeon's view of the palate and oropharynx. The tonsils are removed in a standard manner.

competence. We have not had any lasting palatal incompetence, only that which is secondary to palatal dysfunction in the immediate postoperative period. In general, subjective improvement has been marked and gratifying. Treatment failures do occur with pharyngopalatoplasty, however, and patients who fail to improve require restudy. Some may later require tracheotomy, but by performing the pharyngopalatoplasty first, we feel that we will minimize the number of tracheotomies which need to be done.

Since all of the patients who underwent pharyngopalatoplasty had less snoring postoperatively, the procedure has also been adopted for those patients who have obnoxious or socially unacceptable snoring. As mentioned earlier, nasal obstruction can contribute to snoring and an attempt should first be made to improve the nasal airway if this is needed. This may involve treating nasal allergy by medical therapy; or if there is anatomical obstruction, a surgical procedure to open the nose may be necessary. On the other hand, if the nose is open, then pharyngopalatoplasty is recommended. Both procedures may be necessary, but should not be performed simultaneously because of the possibility of complete airway obstruction due to swelling in the palate with packing and/or swelling in the nose.

In the past decade, obstructive sleep apnea has become recognized as a common disorder. It is gratifying that this and the more ancient benign but troublesome malady of snoring are more amendable to safe and potentially curable therapy.

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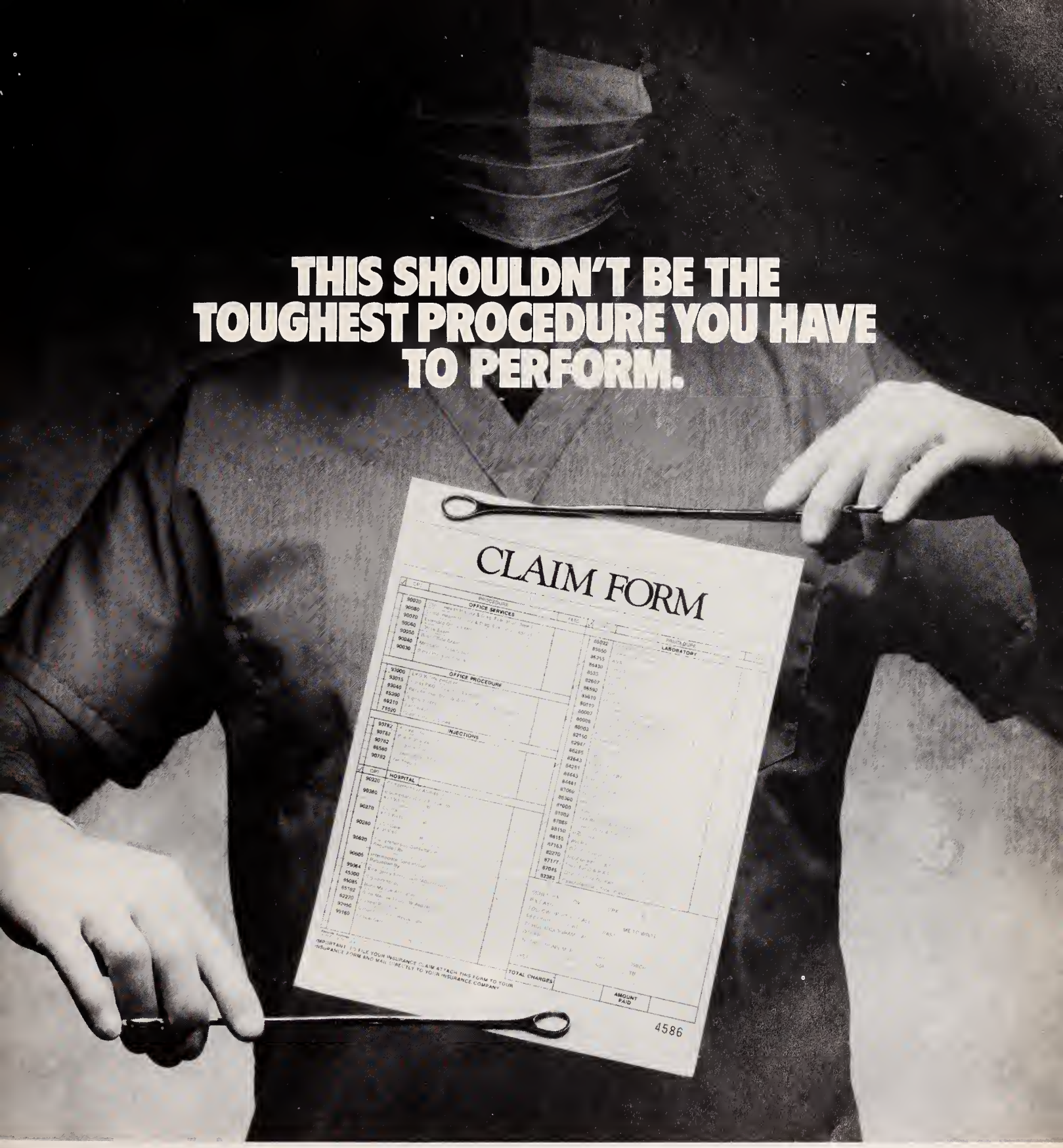
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PROPOSED GUIDELINES TO MINIMIZE RISK OF SEXUALLY TRANSMITTED DISEASES (INCLUDING AIDS)

MAG MATERNAL AND INFANT HEALTH COMMITTEE

In an effort to give people basic information and practical assistance in preventing sexually transmitted diseases, including AIDS, the MAG Board of Directors (January, 1986) approved the MAG Maternal & Infant Health Committee recommendation that the following guidelines be approved for distribution and published in the Journal.

Introduction

WIDESPREAD PUBLICITY about sexually transmitted diseases (STD) has created major public concern about this problem. While some sexually transmitted diseases are readily cured by antibiotics, others (including AIDS) have no known cure. Even among diseases for which effective treatment is known, treatment-resistant strains of organisms have been described.

News media and official reports have tended to focus on sensational questions (should a child with AIDS be allowed to attend public school?) and important health risks (how can medical attendants provide care for STD patients without exposing themselves to risk of infection?). We feel an important question has been neglected thus far:

How can members of the general population reduce the risk of becoming infected with sexually transmitted diseases?

While sexual abstinence is an alternative which a few people might choose, the greatest number of people would find total abstinence unacceptable. Some general guidelines seem appropriate. The guidelines which follow are based upon the best current information available to us and are limited by our present state of knowledge which is far from complete. Recommendations are general and suggested precautions will not offer absolute protection. They will, however, decrease risk to a considerable degree.

A disease is venereal, or sexually transmitted, often because the causative organism is quite fragile and not easily transmitted by other less intimate methods (coughing, sneezing, presence in soil, etc.). Direct contact between warm, moist body surfaces and smearing with infected secretions containing living organisms are required for new infection. Sexual contact is one of the few human interactions which fulfills these criteria. Protection, therefore, requires that an individual avoid having his or her warm, moist body surfaces come in contact with body fluids or infected materials from an infected person.

1. There is minimal risk of sexual infection in a long-term, monogamous (exclusive, one-on-one) relationship with no outside sexual contacts. When neither partner has an outside source of infection, both partners can feel free to interact with each other with minimum restriction (see #4 and #5 below). Exception: Intravenous drug users or those who are at risk of AIDS from some other nonsexual source.
2. Cruising (deliberate, sometimes frequent, opportunistic oral-genital-anal contact with one or more "unknown" partners) is extremely dangerous and offers maximum risk of infection. It would be hard to imagine a higher risk situation, since unknown but readily available partners must be assumed to have been equally

and similarly available to a network of previous and unknown partners. The risk of infection with all sorts of sexually transmitted diseases, including AIDS, increases as the exposure to potentially infected partners increases (that is, the more partners, the greater the risk). Unprotected cruising is so dangerous that it can hardly be viewed as simply an alternate life style.

3. Sexual contact with anyone other than a regular, exclusive partner should be carried out with the use of a condom or penile sheath (oral-penile, penile-vaginal, or penile-anal). The sheath serves to protect the male's partner from contact with semen, urethral discharge, or penile skin lesions of sexually transmitted diseases. It tends to protect the sheath wearer from similar secretions, discharges, and lesions in his partner. The prostitute's practice of genital inspection of the male and washing with soap and water prior to genital contact is of some usefulness when accompanied by urethral stripping (pressing on the urethra from the base to the tip to milk out any infected discharge). The presence of a skin lesion (rash, wart, blister, or ulceration) or of urethral discharge requires cessation of the sexual relationship. Washing, inspection, and urethral stripping of female partners is significantly more difficult and less useful.

4. Oral-anal contact between any sort of partners should be discouraged.

5. Penile-anal contact even between regular, exclusive partners should include a condom or penile sheath.

6. Digital-anal or instrumental-anal penetration should be followed by soap and water washing before any further oral or genital contact with the penetrating object.

7. The AIDs virus is present in tears, saliva, semen, blood, other body fluids, and probably urine and feces as well. Oral-oral contact in the form of casual kissing (or being coughed on or sneezed on) by a person infected with AIDS is probably harmless. The F.D.A. Drug Bulletin (October 1985, volume 15, number 3) points out that there is no evidence that transmission of the virus takes place with such casual contact. Oral-oral contact involving mutual exploration of each other's mouths with tongue and lips and some exchange of saliva (French kissing, soul kissing, or deep kissing) may be a greater hazard. Deep kissing of casual sexual partners should probably be avoided to reduce the risk of AIDS transmission.

8. Infection risk from oral contact with the penis (disease of the mouth/saliva or of the penis/seminal fluid) can be reduced by use of a condom but infection risk from oral contact with the vulva and vagina is not easily reduced. There is no readily available barrier between mouth/saliva and vulva/vagina which will permit contact without direct touch.

9. Three comments about the use of the condom:
 a. A condom should be used only once and then discarded.
 b. Since many men leak a preejaculatory (or so-called "lubricating") fluid from the urethra when they are highly excited, and since part of the condom's purpose is to prevent surface contact between the penis and the partner's body parts, the condom should be put on early in sexual foreplay rather than just before intercourse.
 c. Some men lose their erection rapidly after ejaculation takes place. This increases the risk that the condom will slide off of the penis as the man withdraws his penis from his partner's body. All men should be instructed to reach down with one hand and grasp the condom and the base of the penis together and to hold them together as he withdraws. This will decrease the risk of spillage.

10. Periodic health examinations may reduce the risk of infecting another, but a negative examination for sexual disease cannot be taken as assurance of an individual's safety as a partner. Many infected people will be asymptomatic carriers of infection and may not report for examinations. Examination, unless carefully aimed at searching for STD, may miss patients who are not ill. ■

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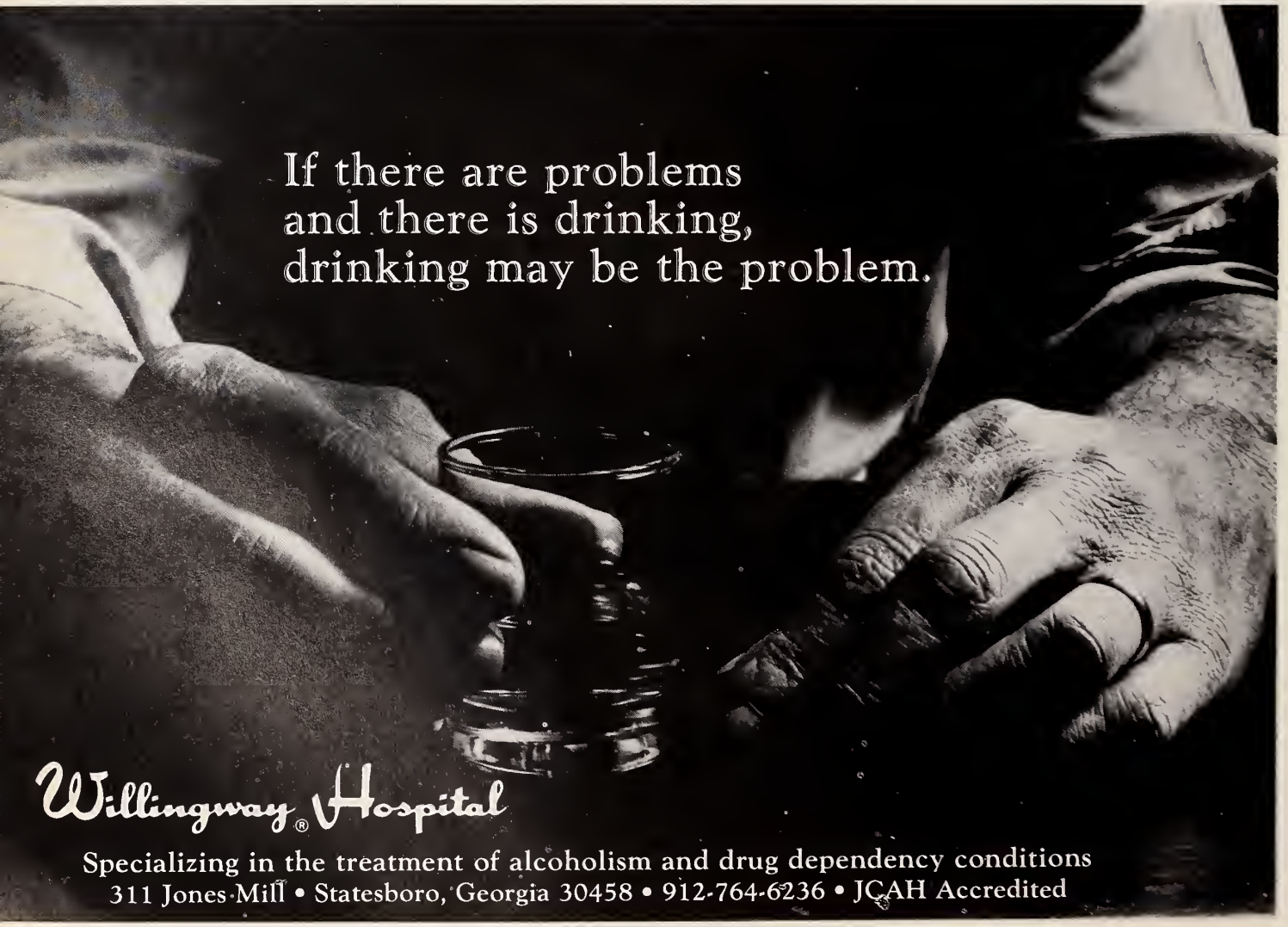
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Hospital Shake-Out

David B. Poythress

WE WILL DOUBTLESS continue to see hospitals sold, reorganized, and expanded as that industry adapts to the rapidly changing medical marketplace. A recent spate of litigation in Georgia reflects this hospital industry shake-out and the competitive forces that drive it.

Two Georgia cases dealt with allegedly *ultra vires*[1] corporate action. In *Richmond County Hospital Authority v. Richmond County,*[2] the county commissioners argued that the reorganization of University Hospital exceeded the lawful powers of the Authority under the Georgia Hospital Authorities Act.[3] The reorganization involved a complicated, 40-year lease of the facility to four private corporations created by the Richmond County Hospital Authority.

The Supreme Court held that the reorganization was valid because it enabled the hospital to attract private paying patients, to compete effectively in the marketplace and thus to avoid total dependence on public funds, and to fulfill its commitment to the pubic health needs of the community.

The entrepreneurial efforts of another hospital produced a different result in *Tift County Hospital Authority v. MRS of Tifton.*[4] The Supreme Court upheld the lower court's decision which enjoined the hospital from selling and leasing durable medical equipment to the general public. The hospital had purchased an existing durable medical equipment supply business located in the same block as the hospital. The Court held there was no legislative authorization — express or implied — for the hospital's enterprise and held it to be *ultra vires*.

Although the Georgia Hospital Authorities Act permits a hospital created thereunder to operate "projects," a hospital "has no authority to engage in any independent business enterprise or occupation such as is usually pursued by private individuals."[5] The plaintiff, of course, was a competing, for-profit supplier of durable medical equipment.

"A recent spate of litigation in Georgia reflects the hospital industry shake-out and the competitive forces that drive it."

When Humana, a for-profit hospital corporation, bought Coweta County Hospital, the U.S. government invited the Coweta County Hospital Authority to repay its $240,000 Hill-Burton grant, which had been used to renovate the hospital in 1977. The Authority argued that the government should grant a waiver, for "good cause," because the terms of the transfer agreement insured the future provision of health care for indigents. In *U.S. v. Coweta County Hospital Authority,*[6] the Court rejected that argument and ordered the Authority to repay the money to the U.S. government.

Finally, one Georgia case involved the important, emerging issue in health care antitrust law of whether a competitor's bad faith opposition to a certificate of need (CON) application may constitute a violation of the Sherman Act. In *St. Joseph's Hospital v. Hospital Corporation of America,*[7] St. Joseph's sued HCA, HCA Management Company, Memorial Medical center and the Chatham County Hospital Authority alleging that the defendants had obstructed its effort to establish a cardiac surgery program by opposing in bad faith St. Joseph's application for a CON. The court found that the defendants' actions were protected under the *Noerr-Pennington* doctrine which protects — in the antitrust context — the rights of freedom of expression and resort to governmental process. Furthermore, the court found that the State Health Planning Agency had denied the CON application primarily because of its own 2-year moratorium on new heart surgery programs in Georgia, rather than because of any actions by the defendants.

Mr. Poythress is MAG's General Counsel.

Notes

1. Ultra Vires: Literally, "beyond powers," said of acts beyond the scope of powers of a corporation, as defined by its charter or act of incorporation. *BLACK, LAW DICTIONARY.*
2. 255 Ga. 183 (1985).
3. O.C.G.A. 31-7-70.
4. 255 Ga. 164 (1985).
5. *Id.* at 165.
6. 777 F2d. 667 (1985)
7. S.D. Ga., CV 484-271, 7-19-85.

Hyperthermia

Arthur B. Kirchner, M.D., R. Roger Sankey, Ph.D.

“Tumors which were previously uncontrolled with radiation alone due to size and/or adverse histology can be effectively treated with a combination of radiation and hyperthermia.”

THE EFFECT OF HEAT on tumor size is well known. Heat was first recorded as being associated with reduction in tumor size by Hippocrates. Coley[1] noted tumor shrinkage following high fever induced by injections of bacterial toxins. The past 15 years has seen a rebirth in interest in using hyperthermia for treatment of human malignancy. Certainly, the rapid development of new technologies in delivering and monitoring heat in the clinical setting have enhanced this interest. The first superficial microwave hyperthermia unit in Georgia was installed in our clinic in December, 1984. Since then a number of similar units have appeared throughout the state. Figure 1 illustrates the essential components of a typical superficial microwave hyperthermia system.

Power deposition sufficient to elevate tissue temperature to therapeutic levels (42-45° C) can be accomplished with electromagnetic radiation at microwave frequencies, radiofrequencies, or by mechanical energy transfer with ultrasonic waves. The choice of heating method depends on the volume of the lesion, the desired therapeutic depth, and the local anatomy. Generally, hyperthermia is divided into three categories:

1. Superficial — for treating small lesions near the surface of the body.
2. Deep or regional — for treating large volumes.
3. Systemic — for treating disseminated disease.

Presently, superficial hyperthermia is the most developed in terms of both instrumentation and clinical application. Deep and systemic hyperthermia are still very much in the investigational stage with respect to both equipment and clinical application.

Superficial or local hyperthermia treatment is best delivered with external microwave applicators or, in some selected cases, with interstitial microwave antennae. Elevation of tissue temperature with microwave radiation depends on the fact that it induces molecular excitation in the treated tissue resulting in an increased temperature. Accurate thermometry is crucial for normal tissue preservation and accurate treatment. In fact, the lack of good thermometry systems in the past is the primary reason that hyperthermia as a treatment for cancer has been so long in coming.

Hyperthermia Inactivates Cells

Three theories have been proposed to explain the cancerocidal effects of heat:

1. Heal alters the cell membrane resulting in increased permeability.[2]
2. Elevated temperature (42-45° C) may cause autodigestion due to destruction of lysosomes.[3, 4]
3. Hyperthermia denatures large proteins thus interfering with DNA and RNA repair from damage caused by radiation or certain chemotherapeutic agents. [5, 6]

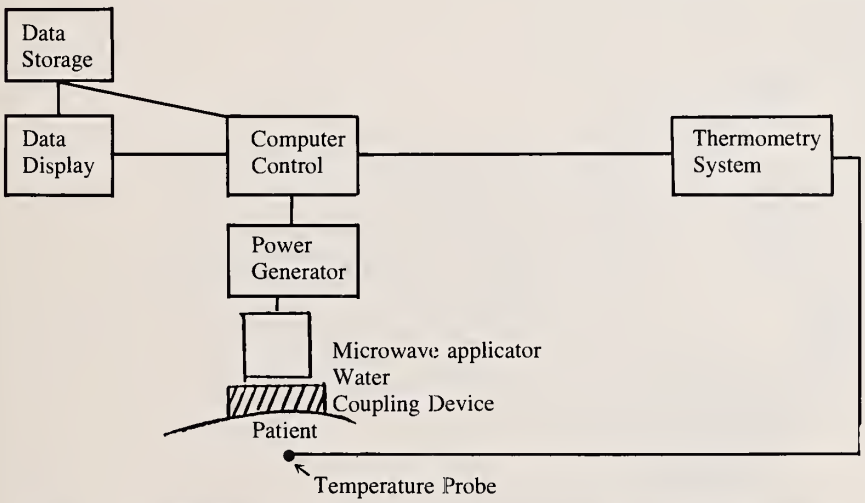


Figure 1 — Components of a Typical Superficial Microwave Hypertermia System

Table 1 — Complete Response Rate For Tumor Regression

Institution	*Radiation*	*Radiation + Hyperthermia*
Memorial Sloan Kettering	**33%**	**80%**
M. D. Anderson	**0%**	**62%**
Duke University	**14%**	**86%**
Roswell Park	**39%**	**87%**
Stanford University	**7%**	**47%**

There is strong evidence that tumors are more sensitive to heat than normal tissue:

1. Malignant tissue frequently outgrows its blood supply, leaving the cells relatively hypoxic and slightly acidotic. Such cells are very heat sensitive as compared to normal cells.[7]
2. Normal tissue dissipates heat far more efficiently than tumor tissue causing selective tumor heating. This is due to disorganized neovascularity with reduced blood flow through tumors. On the other hand, heat actually increases blood flow in normal tissues.[8, 9]

Hyperthermia Potentiates the Effects of Radiation Therapy

The complete response rate in tumors is significantly improved when hyperthermia is used in combination with radiation:

1. Hyperthermia prevents repair of DNA damage due to radiation.
2. Heat is an "S" phase killer, whereas radiation produces an effect in the "M" phase of the cell cycle.[10] The two modalities therefore act synergistically.

Results from five institutions using superficial hyperthermia in combination with radiation are summarized in Table 1.[11]

Which Patients Will Benefit From Hyperthermia

Since hyperthermia increases vascularity in normal tissues,[5] patients previously treated with radiation to the skin can be retreated safely in combination with local microwave heating, e.g., chest wall recurrence in breast cancer. Pre-operative radiation therapy doses can be increased while maintaining postoperative wound healing, e.g., advanced squamous cell cancer of the head and neck and adenocarcinoma of the breast. Tumors which were previously uncontrolled with radiation alone due to size and/or adverse histology can be effectively treated with a combination of radiation and hyperthermia.

Dr. Kirchner is Medical Director, Department of Radiation Oncology, Saint Joseph's Hospital, 5665 Peachtree Dunwoody Rd., Atlanta, GA 30342; Dr. Sankey is Physicist, Department of Radiation Oncology, Saint Joseph's Hospital, Atlanta. Send reprint requests to Dr. Kirchner.

This paper is sponsored by the American Cancer Society, Georgia Division.

To date, there is no clear evidence which suggests any long-term danger from hyperthermia. Acute side effects include pain and skin blisters. These have been reduced to minimal levels by proper coupling of the microwave applicator to the skin.

Hyperthermia as a viable treatment modality for cancer has been established on a limited basis, e.g., certain superficial tumors. Advances in heat delivery thermometry and thermal treatment planning are needed to fully develop hyperthermia in the treatment of cancer patients. There is also a need for continued research in the biology of heat damage to cells.

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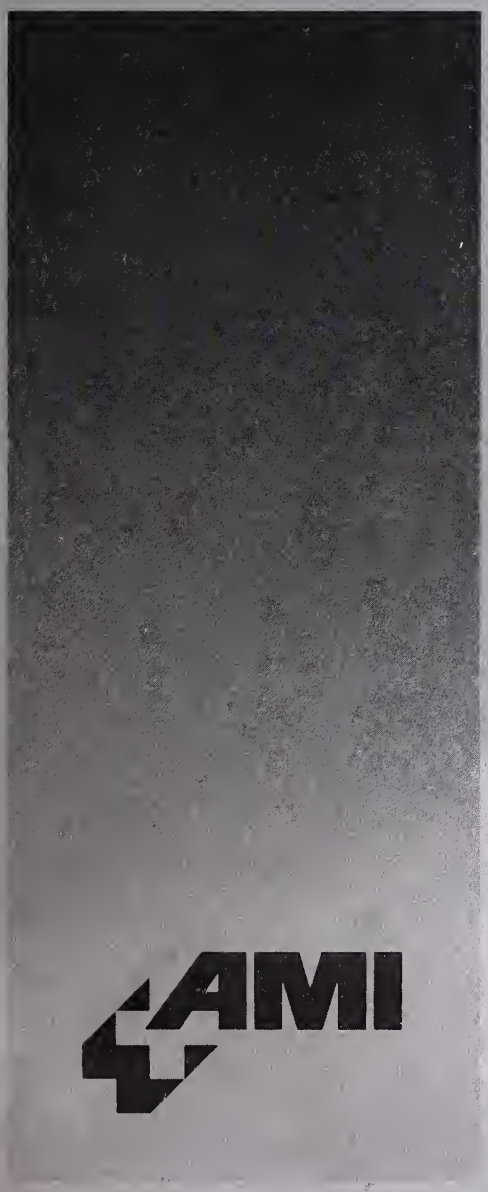
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Esophageal Electrocardiography and Pacing in the Diagnosis and Treatment of Arrhythmias

Mark S. Smith, M.D.

"The most useful role for esophageal electrocardiography is in defining the mechanism of cardiac arrhythmias."

THE PROXIMITY of the esophagus to the heart makes it an easily accessible location for recording of cardiac electrical activity and for atrial pacing. Anatomically, the esophagus is closest to the posterior wall of the left atrium.[1] The recorded atrial activity has been studied and is felt to reflect a combination of left atrial and atrial septal depolarizations.[2] The left ventricle lies farther from the esophagus, and although ventricular electrical activity can be recorded, it is usually of lower amplitude and less discrete than that of the atrium.

Several techniques are available for recording esophageal electrocardiograms (ECG). Although temporary transvenous pacing catheters can be used, these catheters are somewhat inflexible and can potentially cause perforation or other trauma to the esophagus. Many studies have used permanent transvenous pacing leads which are designed for coronary sinus pacing (Figure 1). This is a bipolar lead which can easily be inserted through the nose then advanced to the lower esophagus while the patient swallows. This type of lead is smaller (3.2 mm) than the standard nasogastric tube, is much more flexible than the standard temporary transvenous pacing catheter and can be inserted without difficulty in most patients. A similar disposable catheter has been designed specifically for esophageal use (Esocath, Vygon Corp.). Pill electrodes are also available which can be swallowed by mouth (Arzco Medical Electronics, Inc.). This type of electrode is enclosed in a gelatin capsule which dissolves after it is swallowed.

Whatever type of lead is used, it should be swallowed until it reaches the distal esophagus (about 40-50 cm). The lead should be connected to a standard ECG machine. Preamplifiers are available which permit simultaneous recording of esophageal and surface ECGs. An esophageal ECG can also be recorded without a preamplifier by connecting the right and left arm terminals to the two poles of the catheter to record a bipolar esophageal ECG on channel I, or by attaching the V1 terminal to one of the esophageal catheter electrodes to record a unipolar esophageal ECG.[3] Bipolar recording is preferred, because it gives better distinction between atrial and ventricular depolarizations. After satisfactory ECG recordings have been obtained, the catheter should be manipulated to obtain the best recording of atrial activity. Venticular activity will be recorded with the catheter in the distal esophagus. As the catheter is

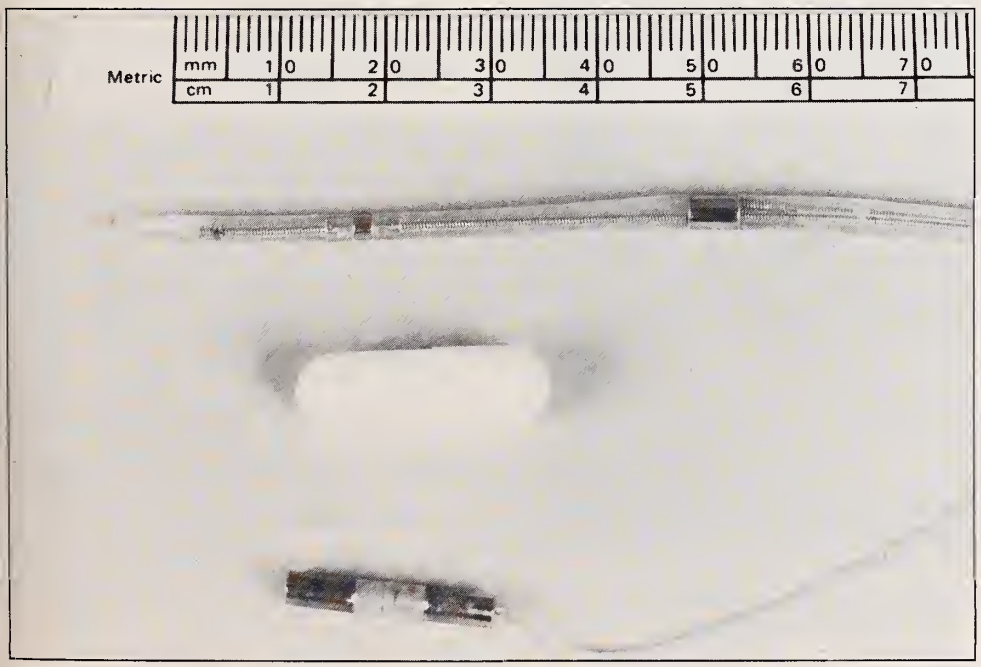


FIGURE 1 — Two types of leads useful in esophageal pacing. Shown at the top is a metric ruler. Below this is a permanent transvenous pacing lead (Medtronic Model 6992); at the bottom is a pill electrode with the gelatin capsule above it. The pill electrode is placed inside the gelatin capsule before being swallowed by the patient.

withdrawn upward, atrial activity should also be recorded. Since most esophageal ECGs are performed to help differentiate ventricular from supraventricular arrhythmias, the catheter should be positioned to record the largest atrial depolarization. This is usually at a distance of between 37 and 41 cm from the nares.[2] The technique described above is most useful in those patients who have sustained arrhythmia. When an arrhythmia is nonsustained and infrequent, a pill electrode may be used to record one of the channels on a Holter monitor.

The most useful role for esophageal electrocardiography is in defining the mechanism of cardiac arrhythmias. In the case of wide complex tachycardias, the relationship of the atrium and ventricle may be diagnostic. A 1:1 trial to ventricular depolarization will be noted on the esophageal ECG in cases of SVT with aberration. In the case of ventricular tachycardia, most patients will show atrioventricular dissociation, with the atrium and ventricle beating at different rates (Figure 2). The esophageal ECG can also be useful in differentiating types of supraventricular tachycardias. Occasionally, patients are seen who are in atrial flutter but in whom flutter waves are not readily apparent on the surface EKG. An esophageal tracing may be helpful in showing atrial flutter with 2:1 block when one of the P waves is buried in the QRS or T segments. Esophageal recording has also been helpful in differentiating the mechanism of paroxysmal atrial tachycardia (PAT) If simultaneous surface ECG and atrial recordings

Dr. Smith is Assistant Professor of Medicine, Section of Cardiology, Department of Medicine, Medical College of Georgia, Augusta, GA 30912. Send reprint requests to him.

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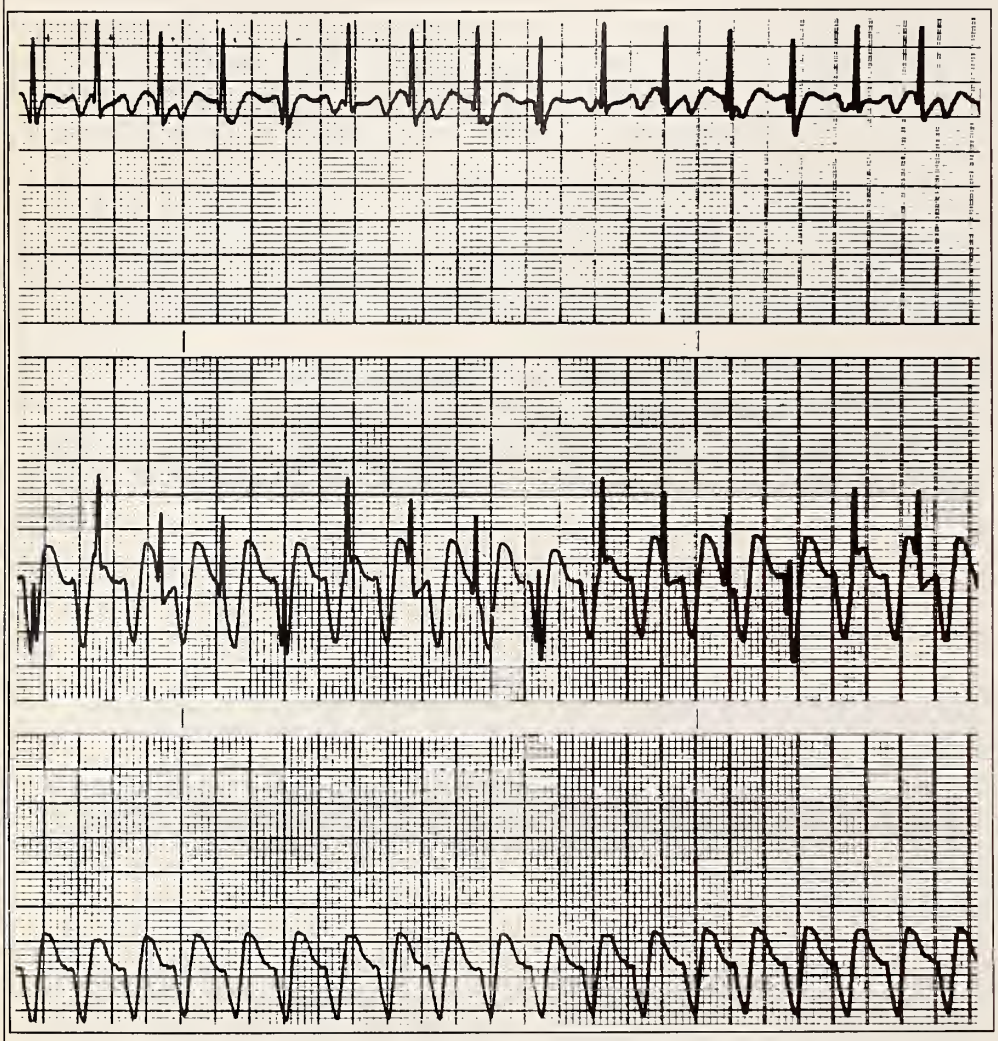


FIGURE 2 — An esophageal recording in a patient who is hemodynamically stable with a wide complex tachycardia. The top tracing shows the surface ECG, the bottom the esophageal ECG, and the middle tracing the combination of the two. The surface ECG shows a ventricular rate of 200, and the esophageal lead shows an atrial rate of 160. This is an example of ventricular tachycardia with atrioventricular dissociation.

from the esophagus are obtained, the ventriculoatrial (VA) interval can be measured from the onset of the QRS to the onset of esophageal atrial depolarization. In patients with typical PAT due to reentry within the AV node, the VA interval is relative short measuring 70 msec or less. In patients who have an accessory atrioventricular pathway (either due to the Wolff-Parkinson-White Syndrome or a concealed accessory pathway) the VA interval will measure more than 70 msec.[4] This is a simple method for sorting out those patients who have accessory atrioventricular pathways and may benefit from invasive electrophysiology testing and surgery.

The close proximity of the left atrium to the esophagus not only provides the opportunity to obtain excellent recordings of electrical activity but also allows one to pace the heart. Pacing requirements from the esophagus are considerably different than those when pacing transvenously. Because of the distance from the heart, a larger current and pulse width must be used. Typically, intracardiac pacing uses a pulse width of 1 msec and a current of 1 or 2 mamps. Pacing of the atrium from the esophagus generally requires a pulse width of 10 msec with currents of between 5 and 20 mamps. For pacing, the esophageal lead is placed as described above. It is assumed that the area which records the largest atrial depolarization will also be the area closest to the atrium, and therefore, result in the lowest pacing thresholds. Pacing is begun with a pulse width of 10 msec, a current of 5 mamps, and a rate which is slightly faster than the intrinsic heart rate. The current is gradually increased until capture is demonstrated on the surface of ECG. In most patients, a current of 5 to 10 mamps is sufficient, however, occasional patients may require up to 20 mamps for pacing. Most patients tolerate pacing very well and complain only of a sensation of mild heartburn. Pacing for extended periods of time has not been reported to cause any significant trauma to the esophagus.

There are multiple uses for esophageal pacing. In almost any case where transvenous atrial pacing is being considered, esohageal pacing may be substituted. This may involve temporary treatment of sinus bradycardia, atrial pacing to increase cardiac output and pacing to increase heart rate in debilitated patients who are unable to exercise for stress testing. Even more useful has been the use of atrial pacing in the treatment and diagnosis of arrhythmias.[5-7] Burst atrial pacing through the esophagus at rates slightly greater than that of SVT are highly effective in terminating many of these arrhythmias. This procedure is easy to perform and can be performed quickly in patients who are hemodynamically compromised. Approximately 70% to 80% of patients with atrial flutter can either be converted to sinus rhythm with pacing or converted to atrial fibrillation where the rate will be easier to control. Unfortunately, atrial pacing cannot

“The close proximity of the left atrium to the esophagus not only provides the opportunity to obtain excellent recordings of electrical activity but also allows one to pace the heart.”

terminate atrial fibrillation.

Esophageal pacing may also be used to determine prognosis. In a patient with recurrent PAT, atrial pacing at a rapid rate can most often induce the arrhythmia. Using the information recorded from the esophageal ECG after induction of the arrhythmia, future decisions on type of therapy can be made. Serial drug testing can also be performed where patients are given different drugs and repeat esophageal pacing is performed. If a drug inhibits the pacing-induced arrhythmia, this would suggest that that same drug given chronically would prevent spontaneous recurrence of the arrhythmia. Esophageal pacing has also been used to determine prognosis in patients with the Wolff-Parkinson-White Syndrome.[8] Elective induction of atrial fibrillation in these patients helps to identify which of them are at risk for developing sudden death in the future.

In summary, esophageal electrocardiography can be performed simply with the available technology. Pacing through the esophagus has many uses in the treatment of arrhythmias and will soon be available to all physicians with the development of new pacemakers specifically designed for esophageal pacing.

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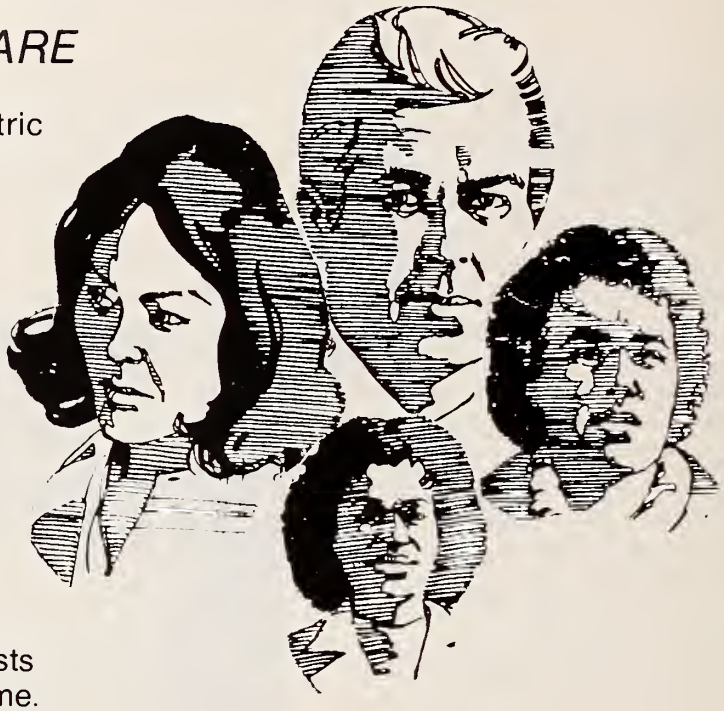
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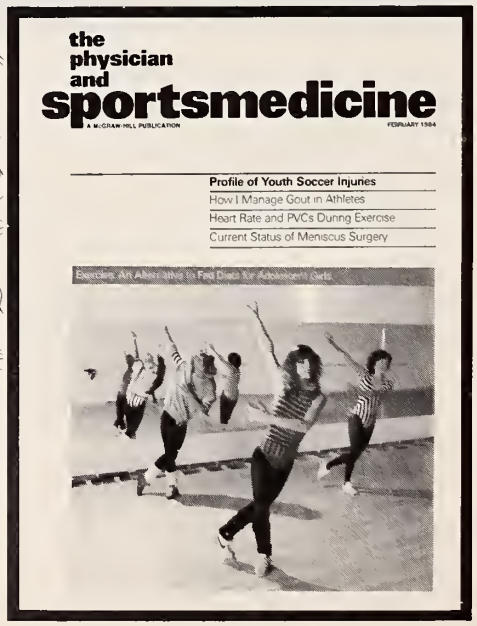
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Fingerle, Richard E., Cobb — ACT (N-2) — I PTH
833 Campbell Hill St., Ste. 111, Marietta 30090

Garringer, Jacqueline A., DeKalb — ACT — OPH
2711 Irvin Way, #203, Decatur 30030

Gearhard, Thomas E., Cobb — ACT (N-2) — FP
1790 Mulkey Rd., Ste. 8-A, Austell 30001

Hall, Lee H., Bibb — ACT (N-1) — R/NR
770 Pine St., #250, Macon 31201

Harbin, L. Stacy, Laurens — ACT (N-2) — GS
505 Academy Ave., Dublin 31021

Hauser, Michael S., DeKalb — ACT — GS
1462 Clifton Rd., NE, Atlanta, 30322

Hirsh, Murray D., Floyd-Polk-Chattooga — ACT (N-2) — AN
13-A John Maddox Dr., Rome 30161

Itkin, Ernest L., Cobb — ACT — CDS/GS
833 Campbell Hill St., Ste. 480, Marietta 30090

Katner, Harold P., Bibb — ACT (N-2) — ID
777 Hemlock St., Macon 31201

Kumar, Virander V., Cobb — ACT — FP
4294 Atlanta St., SW, Powder Springs 30073

McDonald, Harry C., Stephens-Rabun — ACT (N-2) — FP
P. O. Box K, Toccoa 30577

Michaels, Martin C., Whitfield-Murray — ACT (N-1) — PD
702 Mineral Springs Rd., Dalton 30720

Mitchell, Paul G., Cobb — ACT (N-2) — OPH
653 Cherokee St., Marietta 30060

Motley, Carol P., Muscogee — ACT (N-2) — FP
P. O. Box 951, Columbus 31994

Perkel, Michael S., Cobb — ACT — GE/IM
1790 Mulkey Rd., Ste. 60A, Austell 30001

Phillips, Timothy W., Crawford W. Long — ACT (N-1) — NS
1133 Prince Ave., Athens 30606

Polokoff, Jay H., DeKalb — ACT (N-2) — PD
2100 Parklake Dr., NE, Ste. 15, Atlanta 30345

Purwono, Lucas P., Baldwin — ACT — GP
Central State Hospital, Milledgeville 31062

Romzick, Teresa M., Bibb — ACT (N-2) — FP
784 Spring St., Macon 31201

Simpson, William B., Muscogee — ACT (N-2) — OBG
Professional Tower, #401, Columbus 31901

Skilling, Vincent, Bibb — ACT (N-2) — AN
777 Hemlock St., Macon 31208

Stewart, Thomas W., Baldwin — ACT (N-2) — PTH
Baldwin County Hospital, P. O. Box 690, Milledgeville 31062

Whigham, Charles H., Ware — ACT (N-2) — IM
2005-D Pioneer St., Waycross 31501

Wojno, Ted H., DeKalb — ACT (N-1) — OPH
1327 Clifton Rd., NE, Atlanta 30322

Wymer, David C., Baldwin — ACT — R
1957 N. Cobb St., Milledgeville 31061

PERSONALS

Fifth District

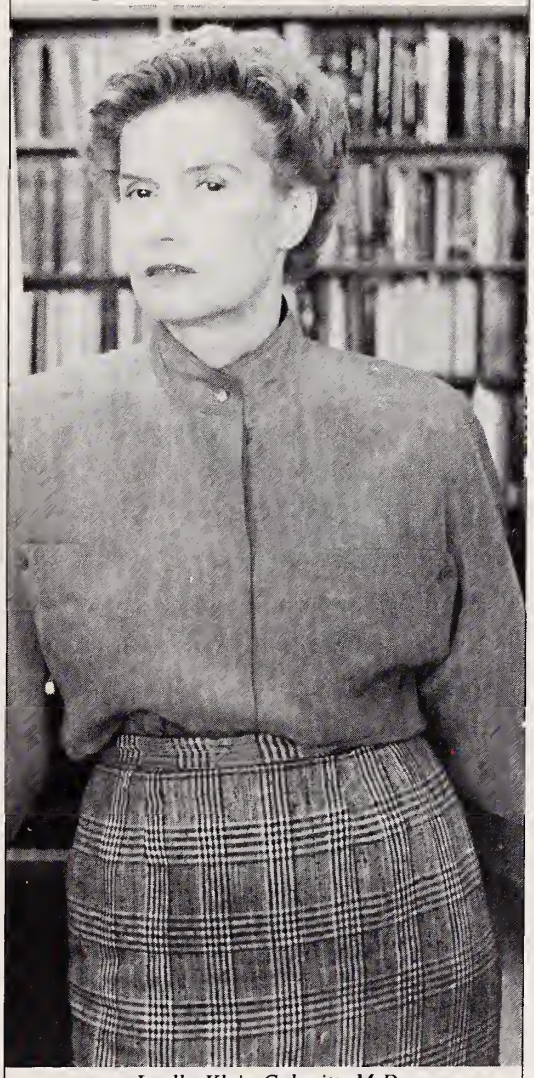
Michael K. Levine, M.D., of Atlanta, a Fellow of the American Academy of Pediatrics, is one of the first recipients of the Academy's PREP (Pediatrics' and Review Education Program) Fellowship Award.

The Medical Association of Atlanta (MAA) presented **William E. Schatten, M.D.,** a plastic surgeon, with the Aven Citizenship Award for outstanding community service at its annual meeting on January 11. MAA awards the Aven Cup annually to a member who most evidently betters his community through dedicated civic and charitable work. Dr. Schatten and his wife, Barbara, have made numerous contributions to his alma mater, Emory University. In 1980, the Schattens established the University's Schatten Scholarship to help defray tuition costs for students in Judaic studies. They also founded the Schatten Gallery for major traveling exhibits at the

Robert W. Woodruff Library located on the Emory campus. He serves as a member of the Emory University board of visitors. He is a member of the executive board of the Atlanta Symphony and is a past president of Ahavath Achim Synagogue. Atlanta B'nai B'rith honored Dr. Schatten in 1980 by naming him Man of the Year. In 1985, he received the Abe Goldstein Human Relations Award from the Anti-Defamation League.

James Z. Shanks, M.D., a Sandy Springs internist, recently passed his Board of Insurance Medicine. Dr. Shanks is member #566 in the 35-year history of the Board. He has been associated as Medical Director with American Agency Life, Life of Virginia, Lincoln National Life, and Munich American. He is the son of the late Edgar D. Shanks, Sr., the former Secretary-Treasurer and Editor of the *MAG Journal* for 2 decades.

Robert Strickland, Chairman of the Board of Trustees of Emory University, presided over a ceremony on March 9 to dedicate the R. Bruce Logue Chair of Cardiology. Dr. Logue, a nationally recognized pioneer in cardiology, joined the Emory University School of Medicine in 1945 and for more than 40 years has been one of the University's most distinguished faculty members. The Logue Chair was established by the Emory University Board of Trustees to establish permanent recognition for Dr. Logue. It will be filled by a cardiologist whose experience, expertise, and dedication exemplify Dr. Logue's many years of commitment to medicine. The Chair also will be used to sponsor research to develop new and improved methods of treating heart disease, to underwrite visiting lecturers in cardiology, and to further refine the teaching and training of cardiologists. Dr. Logue is well known among the students and faculty of the medical school for his love of the medical practice and his profound sense of responsibility to both patients and colleagues.



Luella Klein-Colquitt, M.D.

Luella Klein-Colquitt, M.D., has been named chairperson of the Department of Gynecology and Obstetrics at the Emory University School of Medicine, effective March 1. This appointment, announced by **Richard M. Krause, M.D.,** Dean of the Emory School of Medicine, makes Emory the first co-educational medical school in the United States to have a woman as chairperson of the one academic specialty that deals exclusively with females. Being the first top woman in a field devoted to women is a familiar role for Dr. Klein-Colquitt. Last year she served as the first woman president of the American College of Obstetrics and Gynecology. Dr. Klein-Colquitt has been a major force in establishing Emory's widely recognized programs in maternal and fetal health. She said that she plans to increase the research capabilities of Emory's Department of Gynecology and Obstetrics and to develop stronger clinical programs in women's health in the Emory complex.

Sixth District

David S. Mann, M.D., a family practitioner, was recently appointed staff physician at the Carl Vinson Veterans Administration Medical Center. Dr. Mann was previously in private practice in Macon for 30 years. During his career, he has served as preceptor and associate clinical professor of family and community medicine at the Mercer University School of Medicine.

SOCIETIES

Richard E. Dubois, M.D., internist, has been installed as president of the **Medical Association of Atlanta** with *Gwynne T. Brunt, Jr., M.D.,* Nuclear Medicine, as president-elect. Other officers installed were *Grady S. Clinkscales, M.D.,* secretary, and *David E. Dalrymple,* treasurer. ■

QUOTES

I would not exchange my leisure hours for all the wealth in the world.
MIRABEAU

What is defeat? Nothing but education; nothing but the first step to something better.
WENDELL PHILLIPS

All things are difficult before they are easy.
THOMAS FULLER

Physician's Recognition Award Recipients

LISTED BELOW *are those physicians in Georgia who have earned the AMA's Physician's Recognition Award (PRA) from October through December, 1985.*

The Award was established by the AMA House of Delegates in 1968 "to recognize, encourage, and support physicians who participate regularly in continuing medical education and to emphasize the importance of developing more meaningful continuing medical education opportunities for physicians." A minimum of 150 credit hours of CME must be earned over a 3-year period to qualify for the Award. The hours may include such activities as conferences, residencies, teaching, writing, private reading, listening to cassettes, home study courses, consultation, and peer review; at least 60 of the hours, however, must be from formal CME programs sponsored or co-sponsored for Category I credit by organizations accredited for these activities.

We congratulate the following physicians who have distinguished themselves and their profession by their commitment to continuing education:

Vergil R. Abreu, Millen
Oscar E. Aguero, Valdosta
Earl L. Alderman, Atlanta
Robert S. Allen, Atlanta
Blanca R. Anton, Decatur
Manuel P. Anton, Decatur
Madhukar S. Bandisode, Augusta
William B. Bates, Waycross
Marvin Blase, Atlanta
Donald S. Bohannon, Savannah
Zenaida Capati-Magat, Camilla
Kenneth A. Cass, Eatonton
Roy G. Chambers, Augusta
Harvey B. Conklin, Garden City
John C. Connelly, Columbus
Henry C. Dorminey, Tifton
Edward F. Downing, Savannah
Maxwell A. Eidex, Decatur
Robert Gordon Ellison, Augusta
Allen B. Filstein, Conyers
Robert F. Finegan, East Point
Alan M. Fixell, Atlanta
Stewart D. Gilbert, Tifton
Lourdes N. Gordon, Stone Mountain
David Greene, Atlanta
David A. Grimes, Atlanta
Randy L. Hanzlick, Atlanta
James C. Hays, Atlanta
Marley G. Horton, Savannah
Russell M. Hostetler, Gray
Vernon N. Houk, Atlanta
Rene M. Huberdeau, LaGrange
William C. Humphries, St. Simons Island
James B. Hurst, Milledgeville
Ira J. Isaacson, Atlanta
Jane B. Jennings, Savannah
Jack H. Johnston, Marietta
John D. Kennedy, Marietta
Edwin M. King, Robins AFB
J. Moultrie Lee, Savannah
Charles G. Lodge, Moultrie
Tony J. Ma'Luf, LaGrange
Wallace F. Martin, Lawrenceville
William E. May, Macon
Seaborn S. McGarity, Augusta
Eugene C. McMillan, Macon
Martin L. McRoberts, Albany
Barry W. Morgan, Franklin
Benjamin F. Moss, Augusta
Brigitte B. Nahmias, Decatur
Mehmet H. Nazli, Austell
Craig M. Nielson, Albany
David C. Olansky, Atlanta
Clyde L. Olson, Savannah
Carlos A. Osmon, Austell
Clark L. Osteen, Savannah
Vytautas A. Pakalnis, Augusta
James F. Parks, Gainesville
Juan A. Perez-Enriquez, Milledgeville
Avinash C. Pradhan, Dublin
David W. Retterbush, Valdosta
Teresa M. Romzick, Macon
H. Guilford Rushton, Marietta
Linda M. Sacks, Savannah
Philip B. Sapp, Dalton
John Savino, Savannah
Perry G. Seese, Atlanta
William C. Shirley, Macon
Robert E. L. Shumate, Columbus
Irineo Mina Sibal, Augusta
Stuart H. Silverman, Decatur
George L. Smith, Covington
Randolph R. Smith, Augusta
Thomas M. Stanley, Savannah
John E. Steinhaus, Atlanta
Thomas M. Stewart, Milledgeville
Carlos C. Tan, Sandersville
Frank M. Thames, Albany
Fred B. Thomas, Gainesville
J. Wade Tollison, Augusta
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Joseph M. Turner, Tifton
Anthony J. Vinciquerra, Ft. Stewart
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C. Mark Whitehead, LaGrange
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CLASSIFIEDS

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STYLE — Ordinarily articles should not exceed 3,000 words. Only under exceptional circumstances will articles of over 4,000 words be published. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

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20 YEARS

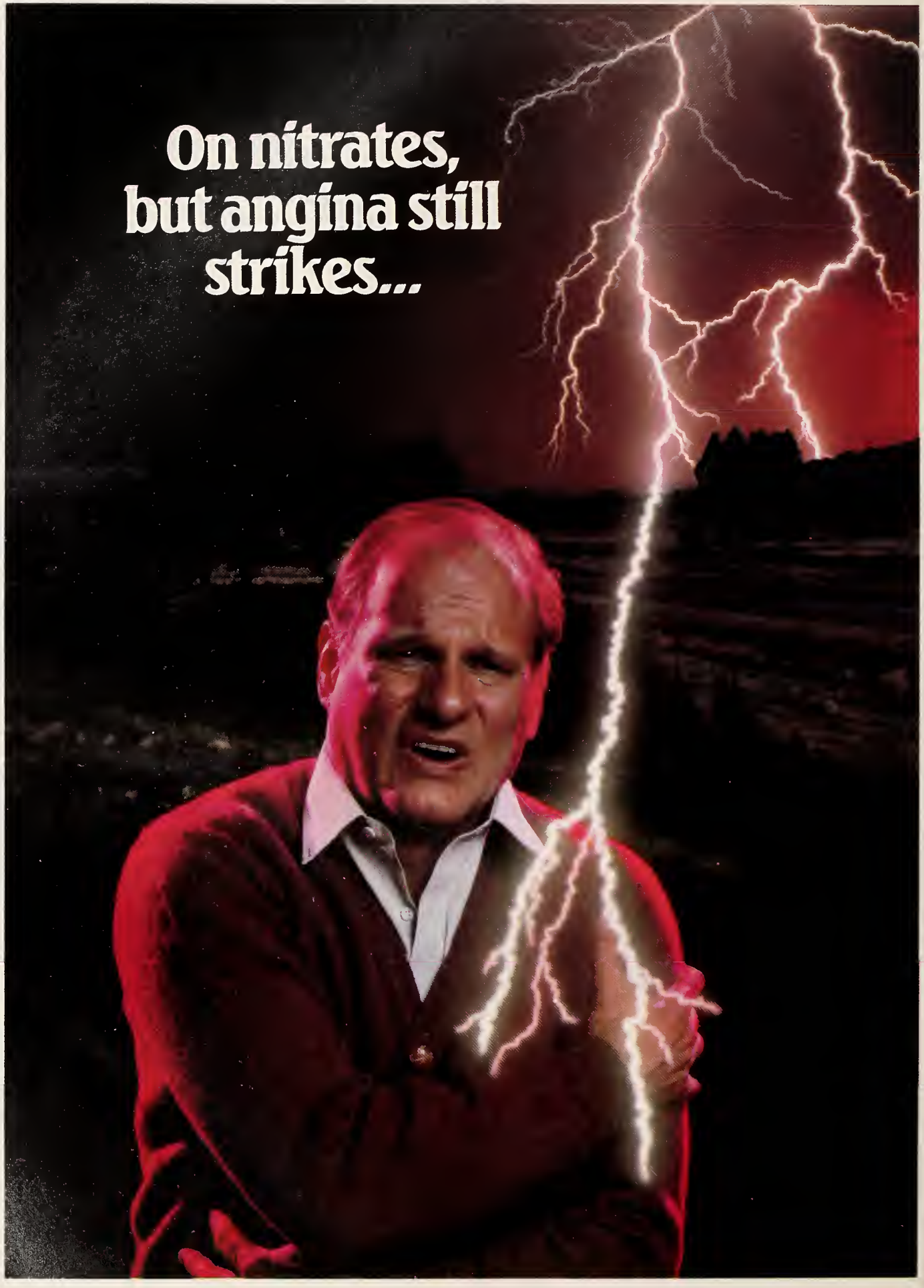
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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. 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Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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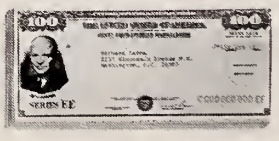


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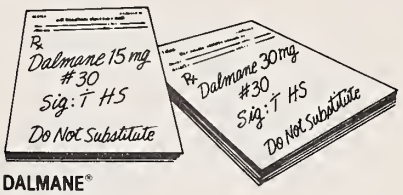
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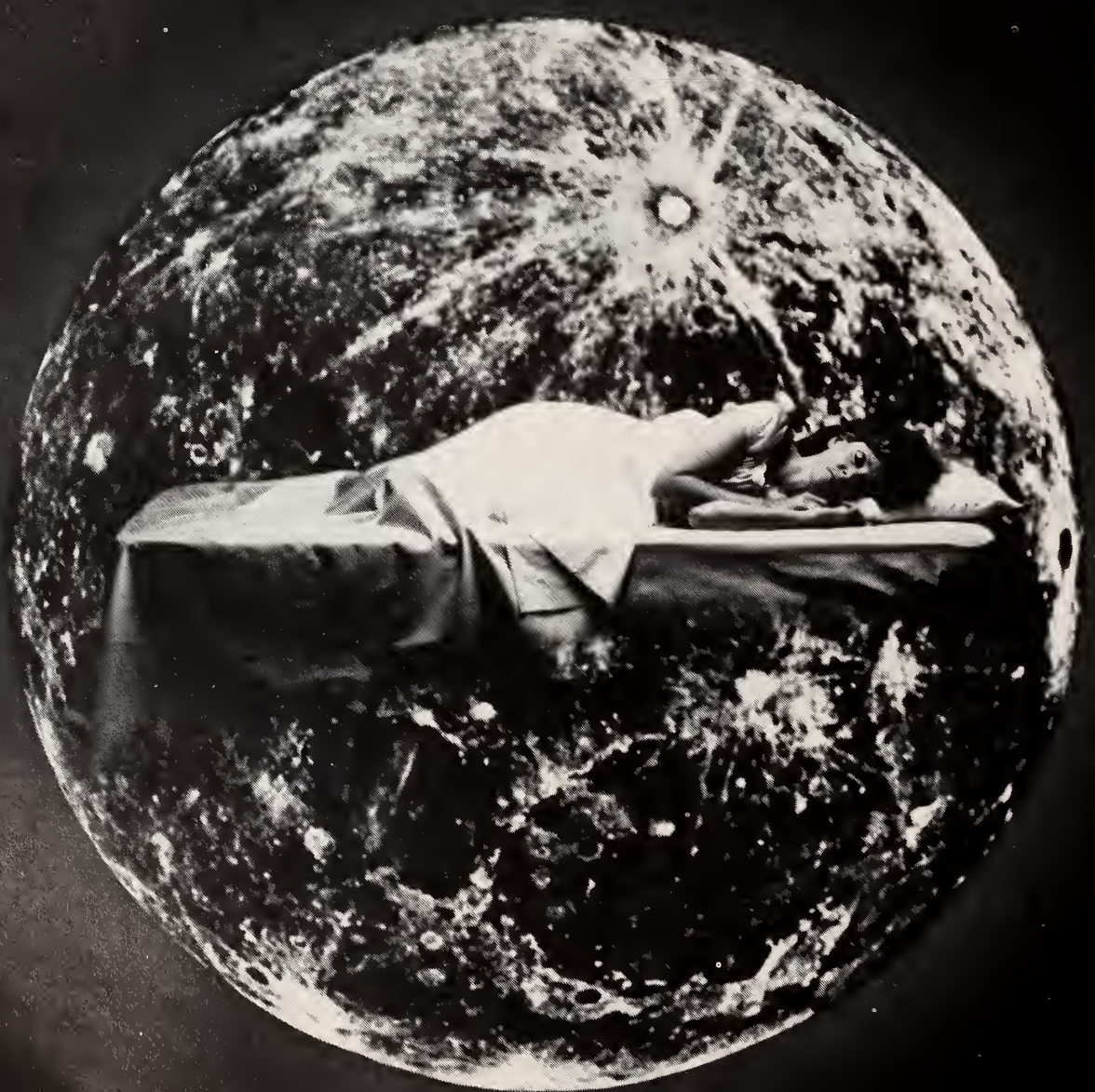
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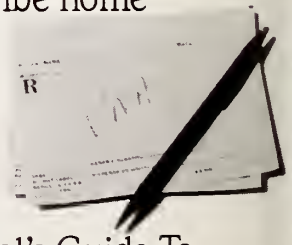
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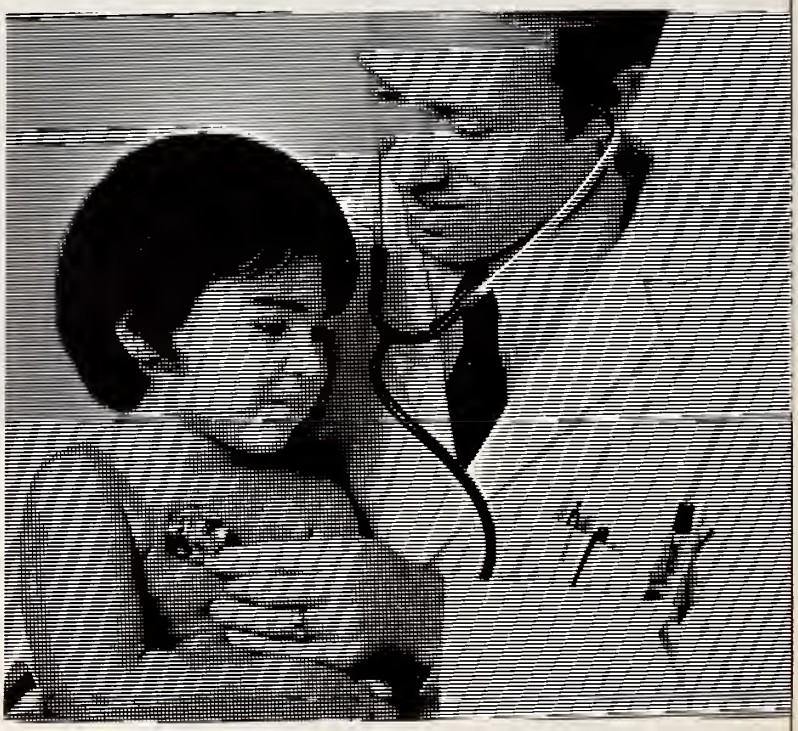
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We know smoking is hazardous to our health. So what's being done to promote a smoke-free environment? In addition to the lead article by Dr. Cohen and the editorial by Dr. Kenny, which address this question, our CANCER and LEGAL sections address issues related to the hazards of smoking.
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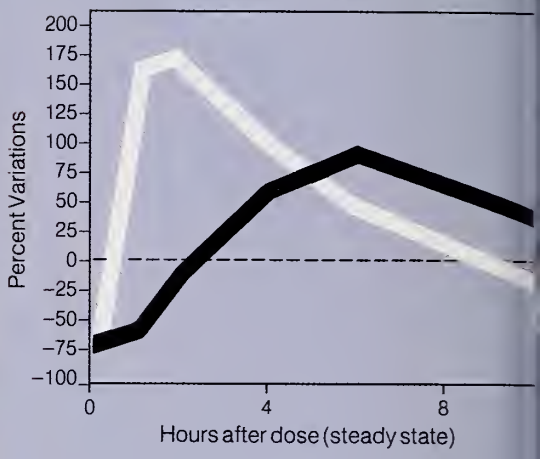
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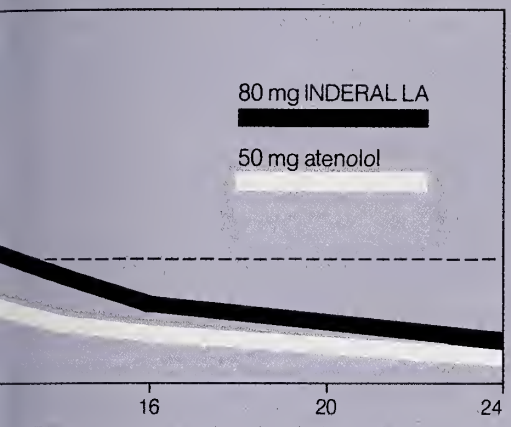
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IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

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MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

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NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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REFERENCES

1. Data on file, Ayerst Laboratories. **2.** Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321-1323. **3.** Sumiye L, Vivian AS, Frisof KB, et al: Potassium loss associated with hydrochlorothiazide versus chlorthalidone. *Clin Ther* 1981;4:308-320. **4.** Ram CVS, Garrett BN, Kaplan NM. Moderate sodium restriction and various diuretics in the treatment of hypertension. *Arch Intern Med* 1981;141:1015-1019.

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LETTERS

Dear Editor:

It was with interest that I read the article by Dr. Stephen C. Hunter on screening high school athletes (*JMAG*, July, 1985, p. 482), but was disappointed that a pulmonary function test was not included in the routine screening of all high school athletes. Pulmonary function testing is now required of all American Olympic athletes, and as such, approximately 8% of all our athletes who participated in the Olympics demonstrated some significant degree of exercise-induced bronchospasm. This is an important finding with not only important health implications, but also important implications in certain sports, especially track or cross-country running. I would recommend that anyone who institutes a medical screening program for high school athletes include pulmonary function testing as part of that routine.

Donald M. Gilner, M.D.
Atlanta

Dear Editor:

Unfortunately, the helpful article entitled, "Refractive Surgery of the Eye" by J. Trevor Woodhams, M.D., (*Journal of MAG* 74:776-779, 1985) contained some significant errors.

Dr. Woodhams stated that the Prospective Evaluation of Radial Keratotomy (PERK) Study declared this operation "safe, effective and stable." We did no such thing. We reported the results of a one-year follow-up,[1] which were encouraging, but which led to no blanket generality as quoted by Dr. Woodhams.

Dr. Woodhams states that a separate article from the PERK Study[2] demonstrated that the cornea stabilizes by two to three months after surgery, when in fact the article showed that 12 months post-operatively, 40% of the patients complained of variable acuity and a significant number had documented variability in refraction and visual acuity from morning to evening.

Dr. Woodhams quotes an article that I wrote as stating that radial keratotomy patients are eligible for 3rd party reimbursement except when excluded by a particular policy. The article contains no such statement or inference, although I think that reimbursement for the surgery is appropriate.

Dr. Woodhams states that "there is no perforation of the full thickness cornea" in radial keratotomy, but surgeons have reported perforation rates of 10 to 30%, a circumstance that increases the chance of intraocular complications.

Dr. Woodhams states that "potential concerns, fortunately, do not seem to be developing," but many ophthalmologists performing radial keratotomy are concerned about slow wound healing that may leave the cornea unstable for months to years, that may be associated with a progression of the effect of the surgery for many years, that may predispose the cornea to latent bacterial corneal ulceration, and that may leave the cornea permanently weakened and less able to withstand direct trauma.

Dr. Woodhams mentioned a lawsuit filed against some members of the PERK study, the National Eye Institute, the National Advisory Eye Council, and the American Academy of Ophthalmology. He states that these individuals tried to "restrict investigation of RK to certain ophthalmologists," which is not true. He states the lawsuit was settled in favor of the plaintiffs, but the fact is that a no-fault, out-of-court settlement was reached: "The settlement agreement is a compromise of disputed claims and the promises contained herein are not, and shall not be construed to be, admissions in liability on the part of plaintiffs and defendants hereby released." The settlement was approved by the court on May 28, 1986.

Concerning alloplastic intracorneal lenses, the author seems to confuse the two types: impermeable polysulfone inlays with a high index of refraction that do not alter corneal curvature and permeable, hydrogel lenses with a lower index of refraction that are intended to alter corneal curvature.

Dr. Woodhams has done a service to the Georgia physicians by describing different aspects of refractive corneal surgery. One wishes he had been more accurate.

Cordially,
George O. Waring, M.D., F.A.C.S.
Professor of Ophthalmology
Director, Refractive Surgery Service
Emory University School of Medicine

References

1. Waring GO, Lynn MJ, Gelender H, et al, and the PERK Study Group: Results of the prospective evaluation of radial keratotomy (PERK) study one year after surgery. Ophthalmol 92:177-199, 1985.
2. Schanzlin DJ, Santos VR, Waring GO, et al. Diurnal changes in refraction, corneal curvature, visual acuity, and intraocular pressure after radial keratotomy in the PERK study. Ophthalmol, in press.
3. Waring GO. The changing status of radial keratotomy for myophia: Part 1. J Refract Surg 2:81-86. 1985.
4. Waring GO. The changing status of radial keratotomy for myopia: Part 2. J. Refract Surg 1:119-137, 1985.

Dear Editor:

The reader can easily appreciate from the tone of Dr. Waring's letter the degree of controversy that still exists regarding refractive surgery of the eye. I hope to answer his criticisms point by point and still maintain neutrality in an area where often battle lines seem to have been drawn.

The words "safe, effective, and stable" are in quotation marks in order to qualify them, which I believe was accomplished in that later part of the article dealing with radial keratotomy.

They in no way imply a blanket endorsement of what is still a developing technique.

Regarding my statement concerning stabilization of the cornea (and its subsequent effect on visual acuity): the article clearly states that "variable visual acuity is *often* encountered until the cornea stabilizes, *usually* by two to three months."

Dr. Waring is correct concerning the source of his statement on the eligibility of radial keratotomy for third party reimbursement. It is to be found in his statement at the time of settlement of the PERK suit brought by Doctors Marmer, Bores *et al,* not in the article referred to.

I nowhere claim that perforation of the full thickness of the cornea does not occur, although some surgeons do advocate full thickness incisions to enhance the refractive effect. The sentence reads, "There are extremely few complications, particularly when . . . there is no perforation of the full-thickness cornea."

Like Dr. Waring, I also am concerned about slow wound healing, the potential for late bacterial infections, and numerous other possible late complications. Indeed, my article points out that follow-up time is less than 7 years in the American experience. Nevertheless, I stand by my statement that these do not seem to be occurring despite the extremely high index of suspicion.

Dr. Marmer, with the sponsorship of the Kerato-Refractive Society, has recently presented the results of 62,814 cases by several hundred radial keratotomy surgeons which show that post-operative complications with vision threatening implications (even defined as the loss of one line of vision) occur at a rate of less than 1%.

My mention of the lawsuit filed against Dr. Waring and other members of the PERK study was not intended to open old wounds. As I stated, a settlement was reached, approved by all parties, awarding damages in six figures to the plaintiffs. In his published comment at the time of settlement, Dr. Waring states, "I now realize that these statements interfered with the practice of radial keratotomy by certain private ophthalmic surgeons and reduced the availability of the procedure to patients in various parts of the country." Not being party in any way to plaintiffs' or defendants' claims, I can only state that I appreciate the merits of both sides' arguments. I hope that we in the ophthalmic community can put this rather unpleasant issue behind us now.

Concerning alloplastic intracorneal lenses, there are actually many types, including several different polysulfone polymers alone. For the sake of simplicity, I purposefully chose not to go into too much detail about an experimental procedure which is still in the animal surgical phase of clinical investigation.

Dr. Waring is to be congratulated and encouraged in his scientific investigation of the various refractive procedures. Let us hope that there is a place for the private practitioner in contributing to these scientific advances if only to outline them to the larger medical community.

Cordially,
J. Trevor Woodhams, M.D.
Atlanta

Dear Editor:

Needless to say, I was sorry to hear about the failure of tort reform in Georgia. I guess I am really disappointed in the members of MAG who did not put in the effort. I am not talking about our MAG representatives [who were involved], but about the many members of MAG who did not write or phone, to really get the point across.

I spent several hours a week for several weeks during the peak of assembly to send hundreds of letters, literature and information to EVERY member of the assembly, besides the key members of all the pertinent committees. Did the other members of MAG do as much? Could we have failed if every MAG physician had spoken to just two legislators or sent two letters? I would certainly have been at the capital for PIP if not in Pennsylvania for my fellowship work. I hope that MAG members did so.

In the past two months, I have talked to many friends and interested business individuals who knew little about the insurance crisis and felt better informed after I had given them my honest interpretation of the problems. If MAG members had done as much, could we have succeeded?

Let's not give up on this issue. We have to continue to educate and inform. Meanwhile, let's find a way to light a fire under complacent members of MAG!

Thanks,
Bob Bulger, M.D.
Department of Anesthesia
Northside Hospital

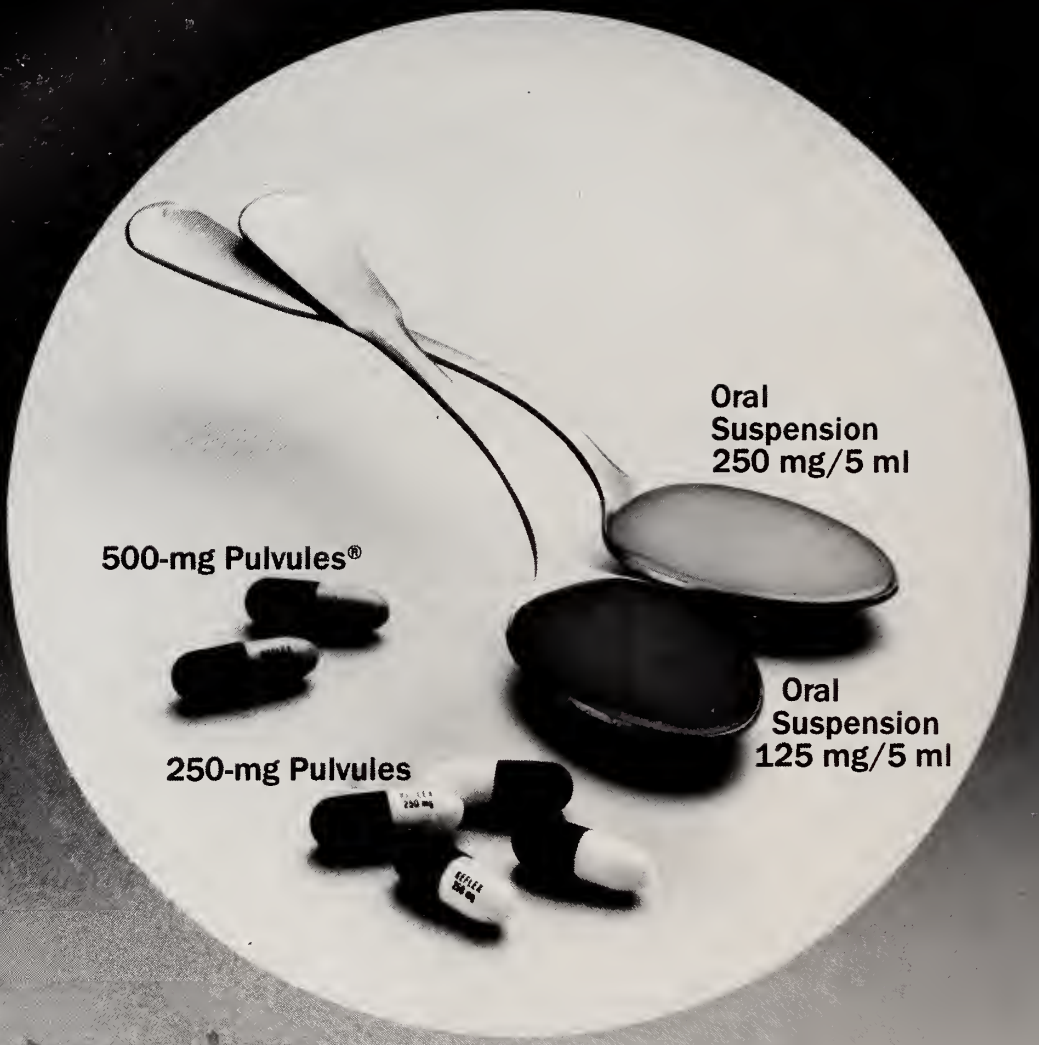
Dear Editor:

Just a note to tell you how much I enjoyed "A Confederate Hospital" in the January issue of the *Journal*. It was excellent. I certainly hope the *Journal* will publish more articles such as this in the future.

Best personal regards.

Sincerely,
Nicholas E. Davis, M.D., F.A.C.P
Atlanta

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The Honor, The Responsibility, and The Opportunity



John D. Watson, Jr., M.D.

As I begin this year as your President, I again wish to thank you for the honor which you have bestowed upon me and my family. I shall do my best to serve all of you with dignity and fairness.

I feel the responsibility at this pivotal time in Medicine and ask your wholehearted effort, support, and participation. Together we can accomplish much; divided we will only flounder and intensify our frustrations.

We have an opportunity unparalleled in Modern Medicine to truly develop and provide a State and its people, our patients, with the medical system it deserves and needs, a pluralistic system that meets the needs of all our people. Medicine allowed a vacuum to occur in the Sixties in leadership and response to governmental perception of necessary change. We have been on the defensive ever since and must turn this tide. This means becoming more involved in the political process than we ever dreamed. We can do this, we must do it. We must fill that vacuum and never allow it to recur again.

Our profession, the greatest health care system the world has ever known, is on the line. This is no time for depression, apathy, or capitulation. We have long contended "we know Medicine best." Now we have to show we can apply as well as believe. It is our decision and our fate. Let's go for it.

Sincerely,

John D. Watson, Jr., M.D.

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Faculty:

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Atlanta, Georgia

Robert A. Cohen, M.D.
Dunwoody, Georgia

Robert M. Eisenband, M.D.
Chamblee, Georgia

Alan M. Fixelle, M.D.
Dunwoody, Georgia

Richard J. Friedman, M.D.
Marietta, Georgia

Jack R. Koransky, M.D.
Atlanta, Georgia

Russell H. Kramer, M.D.
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Cold Turkey for Hospitals, Finally?

"Neither humans nor hospitals will be successful in creating a tobacco-free environment until they overcome denial of responsibility to themselves and others, recognize the severely addictive nature of tobacco, and are motivated enough to deal with the symptoms of withdrawal."

DR. SHELDON COHEN'S treatise, "Institutional Tobacco Withdrawal Symptoms," in this issue of the *Journal* presents an interesting analogy between an individual's withdrawal from tobacco and the difficulties of creating a tobacco-free environment in hospitals. Neither humans nor hospitals will be successful until they overcome denial of responsibility to themselves and others, recognize the severely addictive nature of tobacco, and are motivated enough to deal with the symptoms of withdrawal.

It seems some states and municipalities are ahead of many hospitals, with already enacted or pending legislation which would stringently restrict smoking to a few isolated and well-ventilated areas. New York's Mayor Koch wants to forbid smoking entirely in any enclosed public space including all taxis, stores, and *restrooms*. (Hurrah! — ed.) Passions are beginning to elevate as smokers seek to protect their real or perceived "smokers rights." These restrictions might not seeem so onerous if smokers considered facts recently presented by U.S. Surgeon General Koop. Apparently, in 17th century China, anyone found possessing the noxious weed might be beheaded.

Businesses are recognizing that smokers take more sick days and are contributing unnecesarily to the cost of health and fire insurances. Many are now hiring only nonsmokers and have no problem finding good personnel. Dr. Cohen found it surprising that it has taken so long for otherwise cost-conscious hospital administrators to recognize the beneficial effects of stiff tobacco policies on their "bottom line."

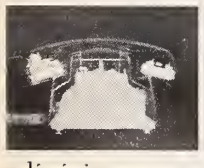
Another major change which occurred in hospitals since Dr. Cohen's somewhat premature editorial in 1980, "Smoke-Free Hospitals — The Time Has Arrived," is a change in philosophy from just treating illnesses to also assuming responsibility for preventive medicine — often called the "wellness concept." Hospital-sponsored aerobic exercise programs, nutritional education, and optional low-calorie and low-fat menus for employees and patients are signs of increasing awareness of the need to provide preventive as well as curative medicine. Still, many hospitals have allowed industries and government to take the initiatives in creating healthful, tobacco-free environments for their employees and clients.

Hopefully, now that the health care industry is recognizing that to be passive on the smoking issue may be perceived as hypocritical and that the "bottom-line" will show the benefits of eliminating tobacco, hospitals will also "withdraw" and achieve their rightful positions as leaders rather than followers on the wellness scene.

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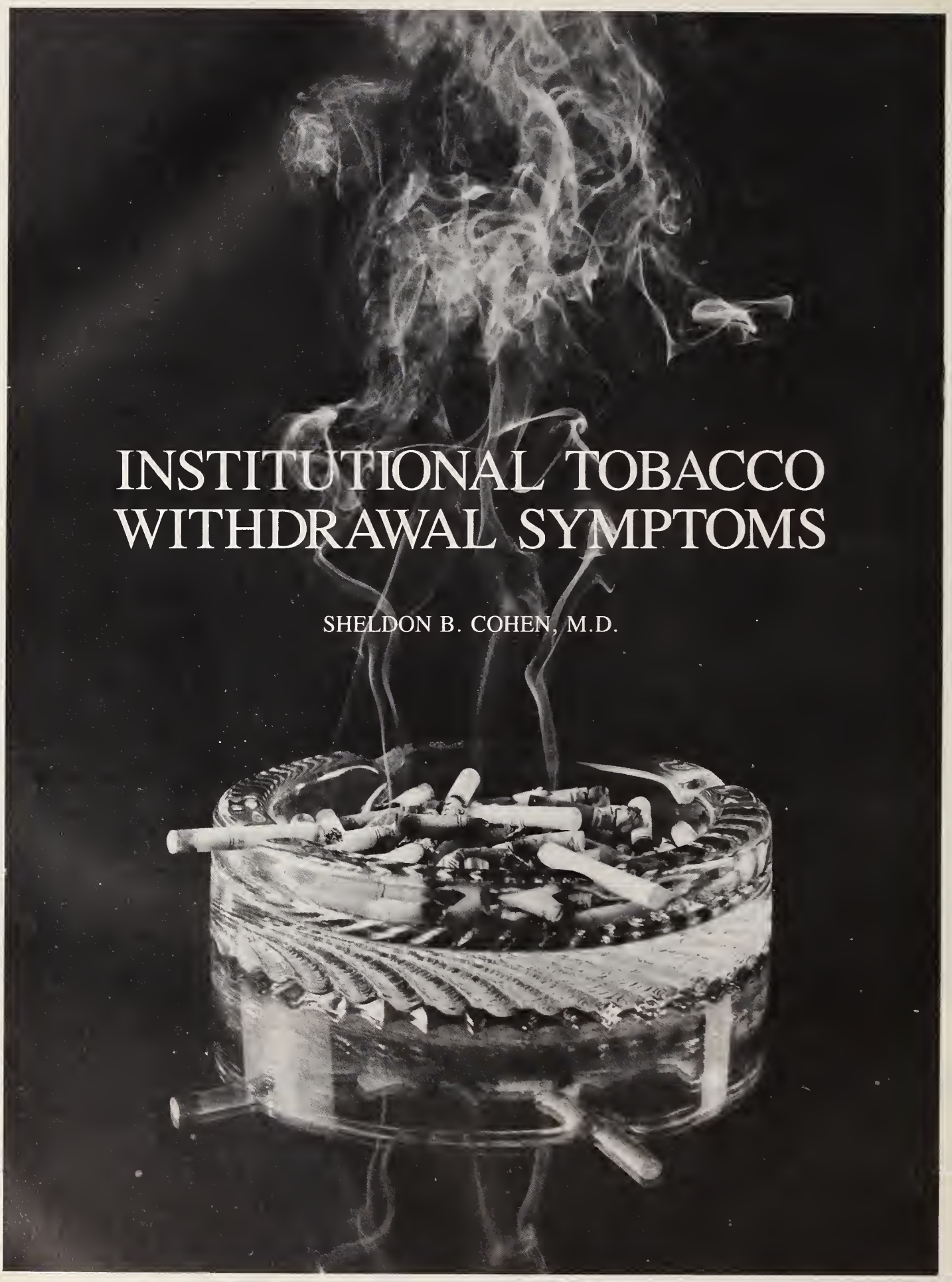
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INSTITUTIONAL TOBACCO WITHDRAWAL SYMPTOMS

SHELDON B. COHEN, M.D.



Many hospitals treat smoking as a convenience for patients rather than as an addiction. This attitude needs to be changed.

In August, 1980, I wrote an editorial entitled, "Smoke Free Hospitals — The Time Has Arrived."[1] With the benefit of hindsight, I should have added "almost!" Despite the verbal support of some colleagues and reprinting of the editorial by other publications, for some time, most hospitals behaved as if their existence depended upon the sale and use of tobacco products on their premises. In recent months, impelled by demands of the general public and the interest of the medical profession in disease prevention, most hospitals have developed restrictions or prohibitions on the use of tobacco products. Change is never easy, and it is the purpose of this article to examine the difficulties, real and imagined, which hospitals encounter when they "kick the habit."

I have treated many tobacco addicts, mostly adult smokers, but tragically also some teenagers who naively subscribe to the belief that smokeless tobacco is non-toxic. In lectures and workshops, I have taught other health professionals methods which they could use in treating tobacco addicts whom they encounter in their practices. As I have talked with these professionals and observed institutions coming to grips with the reactions to developing a no-smoking policy, I have been struck by the many parallel resistances and problems in individual addicts and hospitals.

The initial reaction of the individual addict and the hospital is one of denial. Immediately after the first Surgeon General's (SG) report in 1964, many smokers paid it little heed, with a popular quip being, "I'm not giving up smoking, I'm giving up reading!" Incidentally, it should be noted that in many ways the SG's report was old news: much of the information had been around for many years but it wasn't until it had the official imprimature of the US SG that the world began to notice. Smokers quickly pointed to individuals with long, relatively healthy lives who smoked until old age did them in, citing this as proof that smoking was realy harmless. In a similar vein, clinics and hospitals buried their heads in the sand. They were not in the business of preventing disease, they were often "afraid to rock the boat" and had many rationalizations, such as "when patients or visitors are upset, this isn't the time to take a crutch away from them," etc. Just as the individual addict denied any responsibility for his own health, the hospitals totally denied any responsibility towards their patients. Cynics could note that attempting to reduce tobacco-related illnesses could only negatively impact the hospital's bottom line, and in their economic fight for survival, every institution needs as many sick people as possible!

"Major problems have arisen when key medical or administrative staff are themselves addicted and consequently block or sabotage efforts to make the hospital smoke-free."

The second stage for both individuals and institutions is clearly facing up to the addictive nature of the process, the dependency on tobacco products. This occurs in patients, when faced with obvious physical illnesses related to tobacco use, they find themselves unable to stop smoking, chewing, or dipping. Institutions react in the same manner when they finally recognize they are promoting disease but believe themselves powerless to make any changes. The use of tobacco is seen as so ubiquitous, with many staff members enjoying this "simple pleasure," that hospital administrators and heads of medical staffs considered that change, if any were indicated, should come from some other source. The most glaring example of lack of leadership has been shown by the Veterans Administration Hospital system. The United State's largest group of public hospitals not only sells cigarettes, but is also subsidized by taxpayers since such sales are tax exempt![2]

The third stage of treatment of tobacco addiction is dealing with the consequences of withdrawal. I have found an amazing heterogeneity in the way patients are able to give up the use of tobacco. Some people read the Surgeon General's report, put down their cigarettes, never smoked again, and said they never really missed smoking. At the other end of the spectrum, I have seen those unfortunate patients who have been in great agony when they tried to stop, have developed depressive symptoms, exacerbations of other drug addictions, and have required prolonged psychiatric treatment before becoming completely free of tobacco dependency. Likewise, some institutions have never had a problem (e.g., Seventh Day Adventist Hospitals), whereas other institutions have experienced rebellion and defiance by staff, patients, and visitors. Major problems have arisen when key medical or administrative staff are themselves addicted and consequently block or sabotage efforts to make the hospital smoke-free. In some areas of the county, the institution may be dependent on the largesse of tobacco companies who may exert considerable leverage in hospital policies. A survey of hospital administrators in Georgia[3] showed that 90% of responding hospitals had established written cigarette and tobacco usage policies. However, 28% continue to allow the sale of tobacco products, and most hospitals permit smoking in cafeterias, doctor's lounges, waiting rooms, and patient's rooms.

As a psychiatrist, I have noted with chagrin that some of the areas in many hospitals which have the highest incidence of tobacco use are those operated as psychiatric or drug units. Psychiatrists have typically viewed

Dr. Cohen practices psychiatry. Send reprint requests to him at 490 Peachtree St., Ste. 251-B, Atlanta, GA 30308.

smoking problems as medical conditions, and many psychiatrists have traditionally considered that deep insight and understanding were necessary before change, such as cessation of smoking, will take place. Additionally, on the detoxification and drug units, many of the personnel are ex-alcoholics or drug users who are still strongly addicted to tobacco. It is long been a clinical observation, strongly supported by research, that alcoholics can give up alcohol more easily than they can stop using tobacco. Colleagues have commented about the "smoke pollution" observed at meetings of professionals who treat alcoholics and drug abusers. Many directors of alcoholic detoxification units will not discuss the problem and use massive rationalization and denial for their roles in perpetuating the primary addiction of modern society.

"Many directors of alcoholic detoxification units will not discuss the problem and use massive rationalization and denial for their roles in perpetuating the primary addiction of modern society."

There are many reasons for the continuing move towards completely smoke-free medical institutions. The sale or furnishing of any tobacco product in a medical institution today is *unconscionable*. A hospital could more easily rationalize putting a bar in its lobby and turning its unused beds into a bordello than it could defend trafficking in tobacco products.

The economic advantage of having a completely smoke-free facility will become increasingly apparent. Insurance costs for fire coverage of the building and for employee's health and life benefits will diminish substantially. It is surprising that more hospital administrators haven't already found this bottom line. It seems only a matter of time before the federal government and medical insurers base their reimbursement upon an institution being smokefree, refusing to allow hospitals to include costs incurred because of smoking on the premises. Life insurers and to a lesser degree, health insurers, are moving toward lower premiums for non-smokers and, consequently, it was ironic to learn of the experiences of a non-smoking patient who went to a smoking physician for her insurance physical. Since so few physicians currently smoke, he is indeed an anachronism and probably was surprised when she asked that he not smoke in her presence. I suspect it is only a matter of time before those insurance companies that want to reduce their costs will insist that their physician examiners not be tobacco addicts.

With the current trend towards imposing liability on businesses and institutions which do not adequately safeguard their clients or customers, it would seem only a matter of time before courts hold that hospitals have a duty to recognize *any* addiction and provide education, support, and treatment for all patients. Would any hospital allow an alcoholic *just* three martinis a day or condone the use of patients with visitors openly using marijuana or opiates?

Many hospitals treat smoking as a convenience for patients rather than as an addiction, permitting patients and visitors to smoke in a private room. *Smoking is an addiction*. The only way such a policy can be condoned is to have a note in the chart from the attending physician attesting to the fact that the patient is an incurable addict who has failed to respond to the usual treatment methods. Additionally, hospitals should provide around-the-clock surveillance of smokers because of the obvious danger that the patient may start a fire and endanger not only his own life but the lives of others.

Ho[4] provides a number of helpful suggestions for reducing and/or eliminating smoking in hospitals. He notes, "By implementing a policy in hospitals, we are sending a strong message to the public that smoking is unhealthy. Aided by a conducive environment, many smoking patients may leave the hospital cured of their addiction, as well as of their diseases."

"Insurance costs for fire coverage of the (hospital) building and for employee's health and life benefits will diminish substantially . . . (in a smoke-free environment)."

Among facilities which are taking the lead toward a tobacco-free status are The New England Deaconess Hospital which has gradually instituted a non-smoking policy over the past 8 years[5] and The Clinical Center at NIH which has developed excellent posters and brochures directed toward patients, visitors and employees.[6] Georgia's pioneers have included the Eisenhower Medical Center[7] and the entire Medical College of Georgia complex, the latter under the leadership of President Jesse Steinfeld.[8] On 1 Feb 85, Westlake (IL) Community Hospital, again in a carefully planned program, has moved to the forefront by banning the hiring of employees who smoke. After 7 months, the hospital's president reported, "So far, it has gone very well."[9] A recent survey of the primary teaching hospitals of medical schools in the continental U.S. gives a good picture of the overall progress toward smoke-free medical institutions.[10]

Recognizing the problems encoun-

tered by institutions on the road to becoming smoke-free, the Atlanta Coalition Against Tobacco (ACT), comprised of many of the community's health agencies under the leadership of the Medical Association of Atlanta, has formed the National Clearinghouse for Smoke-free Hospitals. The Clearinghouse's goal is to spare institutions the necessity of reinventing the wheel. The Clearinghouse, c/o the author, welcomes information from hospitals about their programs and will be pleased to furnish information or put facilities in touch with other institutions who have successfully become smoke-free.

"It seems only a matter of time before the federal government and medical insurers base their reimbursement upon an institution being smoke-free."

While somewhat sanguine about our achievement of a smoke-free society by the year 2000, there's little doubt that we will have smoke-free hospitals long before that time.

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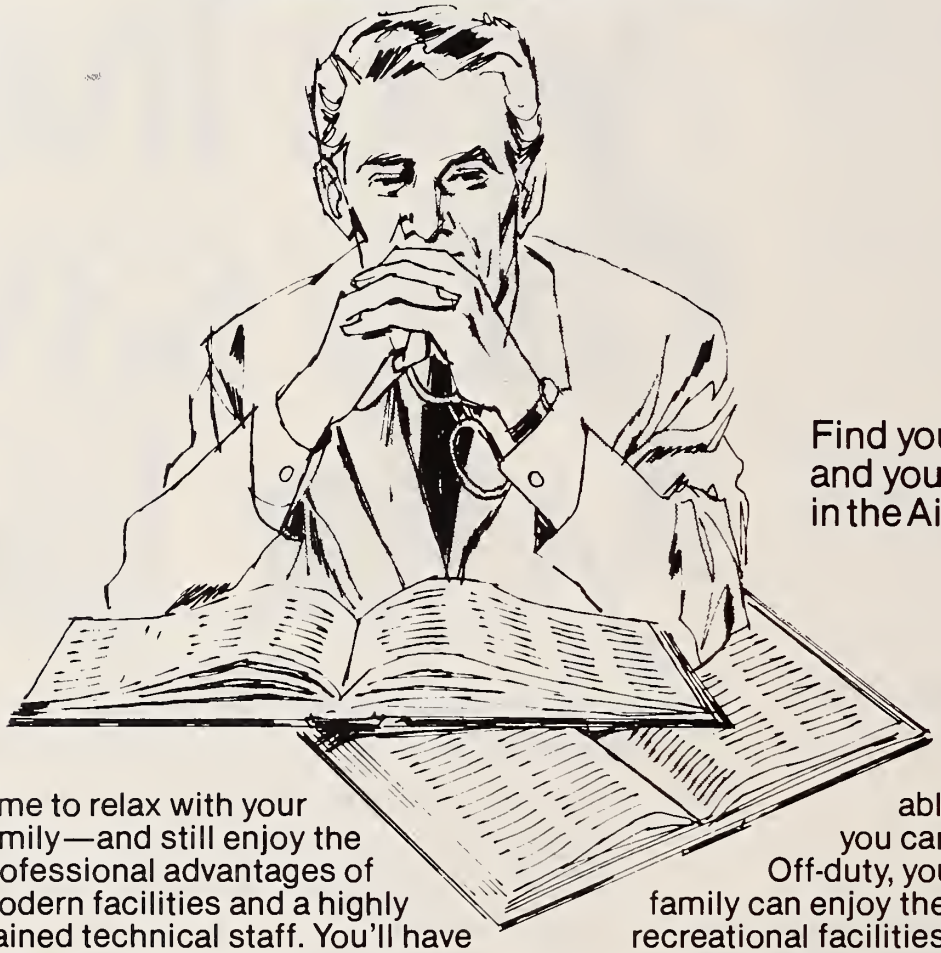
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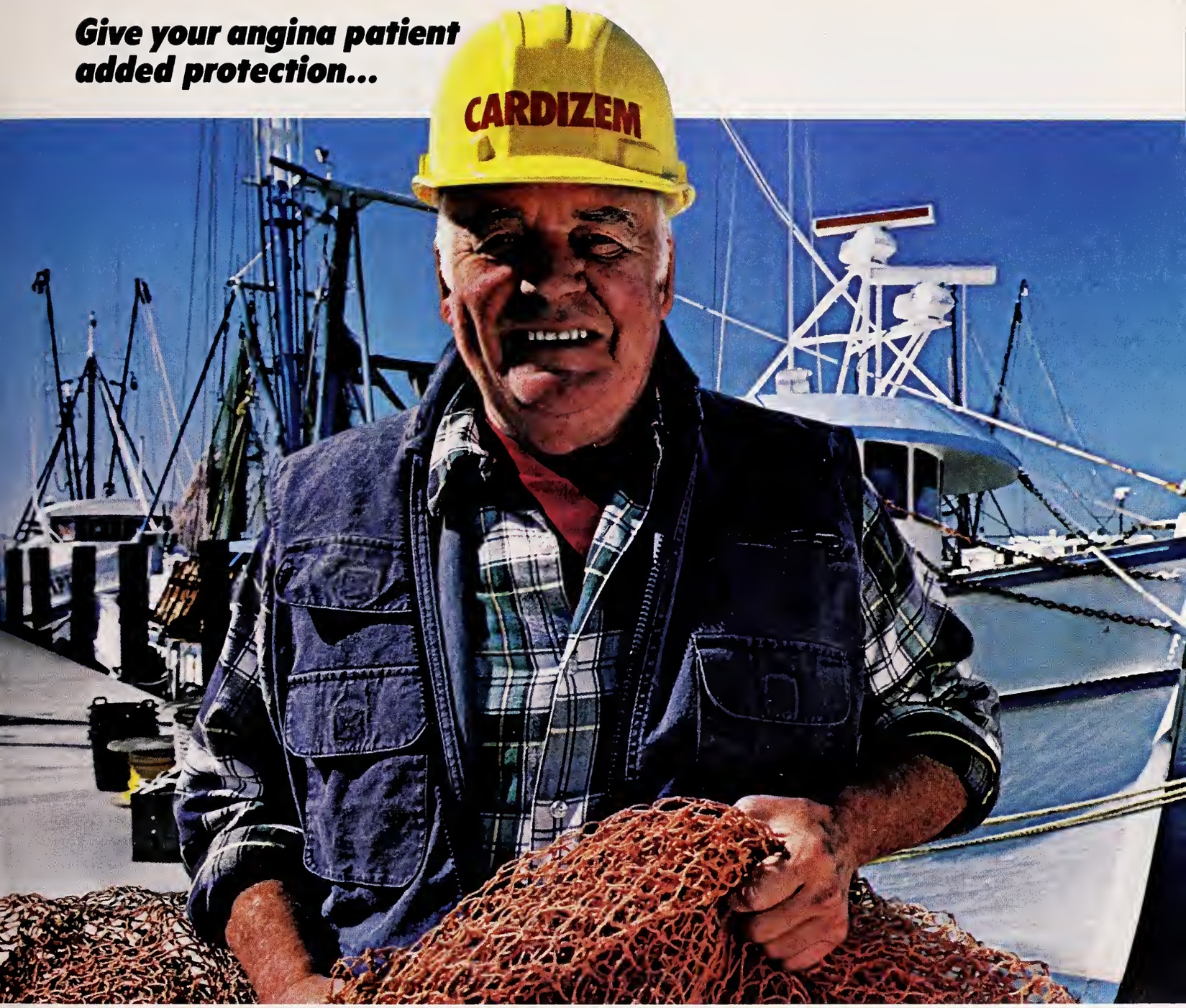
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FEWER SIDE EFFECTS IN ANTIANGINAL THERAPY

BRIEF SUMMARY

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist).

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGDT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGDT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

CARDIZEM 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other. Issued 4/1/84

See complete Professional Use Information before prescribing.

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EARLY POSTOPERATIVE COMPLICATIONS IN BARIATRIC SURGERY

CHARLES E. WILLS, JR., M.D.

The potential benefits must be carefully weighed against the potential complications.

Abstract

One hundred consecutive cases of vertical banded gastroplasty are reviewed for early postoperative complications. These complications are compared with those encountered after jejunoileostomy and gastric bypass. Results suggest that all three types of bariatric surgery carry the risk of significant early postoperative morbidity.

Introduction

Since the advent of bariatric surgery in 1954,[1] both early and late postoperative complications have been significant enough to delay acceptance of this surgery by many physicians. This article describes the early complications following bariatric surgery, based on our experience at Wills Memorial Hospital, Washington, Georgia, since 1963. (See Table 1 for types and dates of procedures performed.) Methods of management and prevention are discussed, with special attention to vertical banded gastroplasty.

Materials and Methods

Early postoperative complications (defined as those beginning within 30 days of surgery) of jejunoileostomy (Figure 1) and gastric bypass (Figure 2) are compared with those of vertical banded gastroplasty (Figure 3) in 100 consecutive procedures performed between April, 1984, and September, 1985.[2,3]

Patients were selected according to Mason's criteria,[4] and general characteristics, including age, sex, weight, and degree of obesity of all groups were similar.

See Table 2 for description of early postoperative complications in the three groups. Cases for comparison have been reported on previously.[2, 3]

Anatomical Complications

Splenic trauma is a risk of gastric bypass surgery, due to the technique used to mobilize the greater curvature of the stomach.[6] Dividing the short splenic vessels is difficult, especially in morbidly obese patients; when laceration occurs, it is usually a result of the retraction necessary to expose and ligate these vessels. Bleeding may be so profuse as to require splenectomy to control hemorrhagic shock.

The risk of splenic trauma is reduced in vertical banded gastroplasty because dissection in the region of the spleen is unnecessary. However, the spleen can still be lacerated by retraction in this area, and two such complications did occur, both managed conservatively.

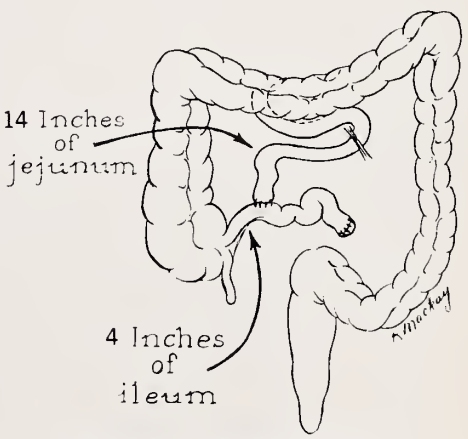


Figure 1 — Jejunoileostomy.

Numerous methods of incisional closure have been tried over the pass 22 years,[2, 3] but minor wound problems continue. Antibiotics administered prophylactically and for 24 hours after surgery, wound irrigation, antibiotics lavaged into the stomach prior to surgery, absorbable and nonabsorbable fascial closure, subcutaneous closure or nonclosure, subcutaneous drain, and skin closure with

Dr. Wills is with the Department of Surgery, Wills Memorial Hospital, Washington, GA. Send reprint request to him at 119 Gordon St., Washington, GA 30673.

Table 1 — Types of Bariatric Surgery

	Number of Cases	*Dates*
1. Jejunocolostomy	3	November, 1963-July 1967
2. Jejunoileostomy	795	July, 1965-May, 1981
3. Gastric Bypass	578	May, 1977-January, 1984
4. Vertical Banded Gastroplasty	155	January, 1984-October, 1985

Table 2 — Early Postoperative Complications

Type	Jejunoileostomy 259 cases	Gastric Bypass 247 Cases	Vertical Banded Gastroplasty 100 cases
1. Wound infections	16 (6.2%)	4 (1.6%)	11 (11.0%)
2. Splenic laceration			
Requiring splenectomy	0	5 (2.0%)	0
Not requiring splenectomy	0	0	2 (2.0%)
3. Pulmonary embolus death	4 (1.5%)	3 (1.3%)	1 (1.0%)
4. Transient outlet obstruction	0	18 (7.3%)	4 (4.0%)
5. Deep femoral thrombosis	1 (.4%)	2 (1.0%)	4 (4.0%)
6. Cystitis	0	0	1 (1.0%)
7. Bleeding diathesis	0	0	1 (1.0%)
8. Bleeding vena cava area	0	0	1 (1.0%)
9. Hepatitis	0	4 (1.6%)	0
10. Pneumonia atelectasis and respiratory failure	0	6 (2.4%)	1 (1.0%)
11. Intra-abdominal hemorrhage treated conservatively	0	1 (.4%)	0
12. Obstruction afferent loop	0	1 (.4%)	0
13. Sepsis, jaundice, and hemolytic anemia	0	1 (.4%)	0
14. Polyethylene catheter embolus-intra cath	1 (.4%)	0	0
15. Sepsis death	1 (.4%)	0	0
16. Hemorrhagic pancreatitis-death	1 (.4%)	0	0
17. Hemorrhaging esophageal varices-death	1 (.4%)	0	0
18. Acute cholecystitis with complications-death	1 (.4%)	0	0

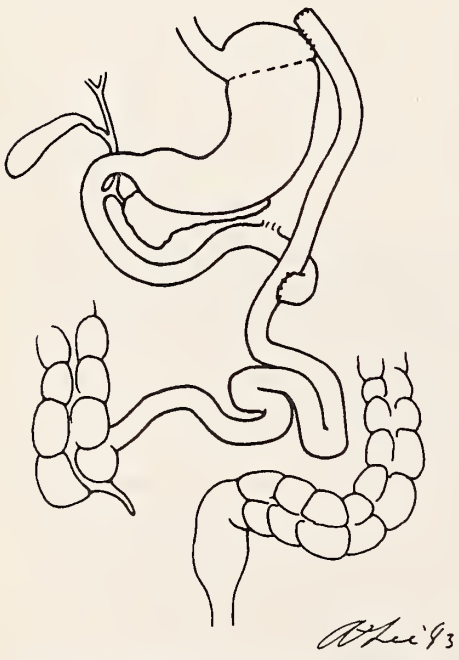


Figure 2 — Rou-en-Y gastric bypass. (Reprinted with permission of Ward Griffin, Jr., M.D., Contemporary Surgery. Vol. 23, December, 1983.)

clips or silk are some of the approaches used in an attempt to reduce the incidence of such problems.

Incision complication rates ranged from 2% in gastric bypass to 6% in jejunoileostomy, to 11% in vertical banded gastroplasty. Subcutaneous fatty layer closure was omitted in all but two of the vertical banded gastroplasty patients. Fortunately, these complications were all relatively mild and were treated with simple wound care. Only one required antibiotics.

Postoperative Complications

The bariatric surgeon's most feared postoperative complication is peritonitis related to anastamic leak, bowel, or stomach disruption. While this did not occur in the present series of vertical banded gastroplasties, the author has noted two deaths following jejunoileostomy due to sepsis, and two deaths following gastric bypass, one due to lower pouch perforation and

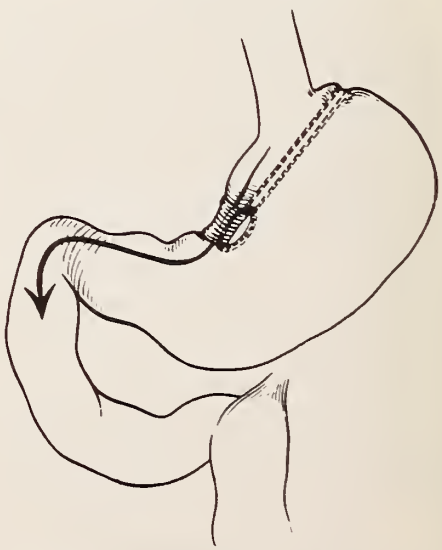


Figure 3 — Gastroplasty with vertical staples. (Reprinted with permission of Edward E. Mason, M.D., Archives of Surgery, Vol. 17, May 1982.)

one due to postoperative sepsis. Meticulous surgical technique is the best protection against such problems; however, if they should occur, they are best controlled by early recognition, operative repair and drainage, antibiotics, and massive supportive therapy.

"Vertical banded gastroplasty appears to be a safer operation than either jejunoileostomy or gastric bypass."

The transient outlet obstructions were mild, and all cases were managed successfully with intravenous fluids for a few days.

Postoperative regurgitation is now rare due to patient instruction. Patients are started on clear liquids on the third day following surgery, and soft pureed foods on the fifth day, when they are given 30 cubic millimeter medicine cups and instructed to take small amounts intermittently. Everything that is swallowed should be in the liquid state, and after ingesting the amount in one cup, ten minutes must elapse before a second cup is started. This regime is followed for eight weeks postoperatively.[5]

Massive pulmonary embolus has proven to be a significant risk of bariatric surgery. There were six deaths in the first 186 cases of jejunoileostomy. Teflon partial occlusion clips were then applied to the inferior vena cava of patients over 40 years of age, over 136 kilograms (300 pounds), and those with venous disease of the legs. In the next 609 procedures, only one death was attributed to massive pulmonary embolus.

Teflon clipping was used in all cases of gastric bypass using the same criterion as noted above, but three deaths occurred due to massive pulmonary embolus. Clipping was continued through the first 54 cases of vertical banded gastroplasty; only one death occurred due to massive pulmonary embolus, but there were four instances of deep femoral thrombosis. When clipping was halted, neither massive pulmonary embolus nor deep femoral thrombosis occurred in any patient.

The one instance of bleeding diathesis was quite severe, requiring 500 cc packed cells, 3000cc whole blood, and 1000cc fresh frozen plasma. This was thought to be due to excessive aspirin ingestion preoperatively. Non A, non B hepatitis followed five weeks later and was managed conservatively.

One case of early postoperative cystitis occurred in a schizophrenic patient who could not void. Repeated catheterization and an indwelling catheter resulted in simple cystitis, responsive to antibacterial therapy.

Discussion

Bariatric surgery should not be undertaken lightly but considered only after all conservative methods of managing morbid obesity have failed. The morbidly obese patient is a significant surgical risk, and the potential benefits of bariatric surgery must be carefully balanced against the potential for operative and postoperative complications. Vertical banded gastroplasty appears to be a safer operation than either jejunoileostomy or gastric bypass.

The possibility of peritonitis related to anastomatic leak can be minimized via meticulous surgical technique. However, if such complications arise, early recognition and appropriate management are imperative.

Good surgical technique is also paramount to wound healing, but due to the deep fatty subcutaneous layers, some wound complications are inevitable. Contrary to some recent opinions,[9, 10] the incidence of complications increased when the subcutaneous fatty layer was not closed.

In recent years, more emphasis has been placed on the desirability of preserving the spleen whenever possible.[7, 8] Splenectomy will still be required in some cases due to the technical difficulty involved in dealing with the rapidly bleeding spleen in massive obese patients.

Vena cava clipping appeared to reduce the incidence of death due to massive pulmonary embolus, but the 8% occurrence of deep femoral thrombosis has raised suspicions that the clip may be contributing to this complication. Discontinuing clipping has also eliminated the possibility of postoperative bleeding in the region of the clip.

Careful preoperative evaluation, leg exercises, and respiratory therapy following surgery, as well as early postoperative ambulation are sedulously practiced in order to prevent pulmonary complications. Advising patients to stop smoking preoperatively has, unfortunately, met with limited success.

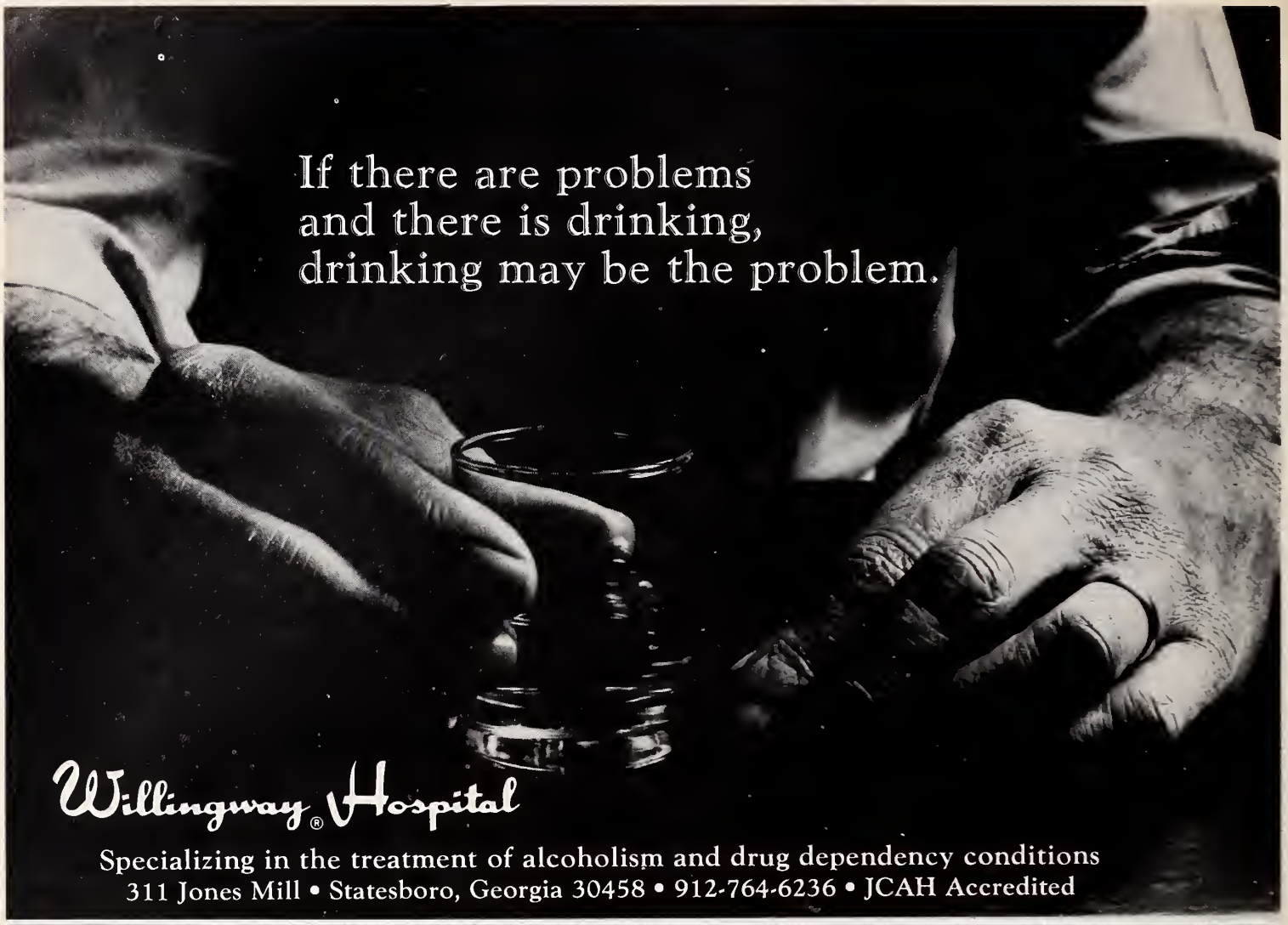
Conclusions

Conservative methods of weight loss should always be the first line of treatment in obesity. However, it is well known that successful permanent weight loss occurs in very few patients who attempt such programs.

Patients who meet the appropriate criteria may be candidates for bariatric surgery. Despite early postoperative complications, vertical banded gastroplasty appears to be the safest procedure in the bariatric surgeon's repertoire at this time.

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STROKE IN SICKLE CELL DISEASE

ROBERT J. ADAMS, M.D., FENWICK T. NICHOLS, M.D.,
PATRICIA HARTLAGE, M.D., VIRGIL McKIE, M.D., KATHY McKIE, M.D.,
PAUL MILNER, M.D., TAHER EL GAMMAL, M.D.

Clinical Picture

SINCE THE REPORT of left hemiplegia in a young boy by Dr. Virgil Sydenstricker at the Medical College of Georgia in 1923,[1] stroke has been recognized as a major cause of morbidity and mortality in sickle cell disease patients.[2-6] Estimates of the incidence of stroke in large clinic populations vary from 5 to 17%.[5, 6] Cerebral infarction is the most common type, accounting for 75% of these events. Most of the infarctions are seen in children under 15 years of age, with a peak incidence between 5 and 10 years.[6] Intracranial hemorrhage occurs in 25% of the cases, usually in older children and adults.[4, 6, 7] Stroke among homozygous siblings has been noted,[6] but no familial or sex predisposition has been firmly established.[8] Cerebrovascular complications have been reported in both sickle cell trait (HbSA)[9] and in hemoglobin SC[10] disease, but are rarely encountered in these groups.

Patients with infarction present with localized neurologic deficits which may be accompanied by focal or generalized seizures.[4, 6, 7] Alteration of consciousness is observed in 20% of cases.[6] Isolated seizures or transient neurologic deficits may be the first sign of impending infarction; in most cases, however, no warning signs are evident. Although stroke may complicate a vaso-occlusive crisis or infection, it occurs in 80% of the cases without associated generalized illness.[4] Intracranial hemorrhage may be either subarachnoid, intraventricular, or intracerebral, but reported data are insufficient to determine the relative frequency of each.[6] The clinical presentation of hemorrhage is more dramatic than that of infarction, usually resembling subarachnoid hemorrhage with severe headache, nuchal rigidity, vomiting, and depression of consciousness. Focal neurologic signs are seen in some cases. Of 35 cases of stroke reported by Powars et al.,[6] 23 were infarctions, 11 intracranial hemorrhages, and one a documented cerebral fat embolus. Of the 11 hemorrhages, three had cerebral aneurysms and one an arterio-venous malformation. Other workers have also documented underlying aneurysms in this population and have emphasized the need for angiography after subarachnoid hemorrhage.[11, 12]

> ***"Although it is assumed that the hemoglobinopathy of sickle cell disease plays a causative role in stroke, the relationship is by no means clear."***

The early mortality from cerebral infarction varies from 5% to 20%.[5, 7] The incidence of recurrent infarction has been estimated from 67% to 90%,[6, 13] with most of these seen within 3 years of the initial event. The prognosis after stroke is variable, but 30 to 40% of victims recover with minimal or no deficits.[4] Recurrent, especially bilateral, infarctions however, usually result in severe disability.[12] Hemorrhage generally has a worse prognosis, with an acute mortality reported to be as high as 50%.[6]

Pathogenesis

Although it is assumed that the hemoglobinopathy of sickle cell disease plays a causative role in stroke, the relationship is by no means clear. Recent data have not supported the simplistic concept of stroke resulting from small vessel occlusion secondary to intravascular sickling of erythrocytes. Pathologic studies provide evidence that such small vessel occlusion does occur in the brain,[2, 3, 5] but it has been difficult to determine how these findings are related to the major hemiplegic syndromes seen

Drs. Adams and Nichols are with the Department of Neurology, Cerebrovascular Disease Section; Dr. Hartlage is with the Department of Neurology, Pediatric Neurology Section; Drs. V. McKie and K. McKie are with the Departments of Cell and Molecular Biology, Comprehensive Sickle Cell Center, and Pediatrics; Dr. P. Milner is with the Department of Pathology; and Dr. Gammal is with the Department of Radiology, Medical College of Georgia, Augusta. Send reprint requests to Dr. Adams, Dept. of Neurology, Cerebrovascular Disease Section, MCG, Augusta, GA 30912.

clinically. Cerebral angiography has clearly established that many of these stroke patients have an occlusive vasculopathy affecting the large arteries at the base of the brain.[14-19] The distal internal carotid artery and the proximal middle and anterior cerebral arteries are especially affected, in many cases bilaterally. In the angiographic series of 30 stroke cases reported by Russell et al.,[13] so prevalent was this vasculopathy that only three of these patients were found to have normal angiograms. Based on pathologic information, these lesions appear to be non-inflammatory endothelial hyperplasia.[15, 20] As many as 30% of the cases studied showed angiographic evidence of an abnormal pattern of collateral vessels called "moyamoya" (a Japanese term meaning "puff of smoke," describing the appearance of these dilated vessels on the angiogram).

"Although unproved, it is likely that stenotic lesions involving major vessels predispose to the hemiplegic syndromes seen in these children (with sickle cell disease)."

Although unproven, it is likely that stenotic lesions involving major vessels predispose to the hemiplegic syndromes seen in these children. This is supported by cranial CT in which the pattern of infarction suggests major vessel or branch occlusion.[6] Occlusion at sites of high grade stenosis could be triggered acutely by factors such as platelet aggregation[21] or changes in blood viscosity.[22] There is current interest in the theory that abnormal adherence of sickle cells to vascular endothelium, demonstrated in vitro,[23] may cause repeated vascular injury and promote the development of these lesions. Although patients with higher levels of fetal hemoglobin (HbF) are thought to have a milder clinical course, Powars et al.[24] were unable to demonstrate a significant relationship between the level of HbF and stroke risk. One study did find a significant association between risk of stroke and cardiomegaly.[12] Despite such efforts to correlate stroke risk to clinical and/or hematologic abnormalities, no clear cut predictive pattern has yet emerged.

High resolution magnetic resonance imaging (MRI) offers the prospect of non-invasive visualization of brain and major intracranial vessels. We have applied MRI and cranial CT in 22 sickle cell patients, 12 with a history of stroke, to determine if MRI could detect occlusive vasculopathy. MRI demonstrated three vessel occlusions (two internal carotid and one middle cerebral) and three stenotic internal carotid arteries. These findings were supported by angiography available in two cases, indicating that at least severe vascular abnormalities can be detected with this technique. Cerebral infarctions in 10 cases were well delineated (Figure 1). No vessel abnormalities were seen in the non-stroke group; three cases had subclinical white matter lesions of undetermined etiology, presumably due to vascular disease. This study is being extended to determine if MRI can diagnose lesser degrees of stenosis and/or document moyamoya formation.

The cause of intracranial hemorrhage in the absence of aneurysm in these patients is unclear. Powars, Milner, and colleagues (personal communication) have observed 10 sickle cell disease patients who survived cerebral infarction in childhood, yet experienced subarachnoid and/or intraventricular hemorrhage as older children or adults. They suggest that intracranial hemorrhage may occur as a later manifestation of the same vasculopathy which causes infarction in childhood.

There are intriguing similarities in the patterns of stroke in sickle cell disease and that seen in Moyamoya disease, originally described in the Japanese but now recognized worldwide.[25] These patients experience progressive occlusion of large intracranial vessels and develop an abnormal network of collateral vessels with the characteristic angiographic appearance of moyamoya. Both diseases are associated with early cerebral infarction followed by the risk of intracranial hemorrhage (subarachnoid and/or intraventricular) later in life. Hyperventilation can precipitate ischemic symptoms in both conditions.[25-26] In Moyamoya disease, bleeding results from the rupture of small vessels in the basal ganglia and periventricular area,[25] and a similar mechanism may be at work in sickle cell disease as well.

"There are intriguing similarities in the patterns of stroke in sickle cell disease and that seen in Moyamoya disease. . . ."

Other factors associated with stroke may also be involved. Fat emboli to the brain, probably from bone infarction, have been documented.[6] Sickle cell disease affects the heart causing cardiac enlargement[27] and myocardial infarction,[28] raising the possibility that some strokes may be caused by cardiac emboli. The blood of sickle cell disease patients shows abnormal viscosity characteristics, particularly under conditions of deoxygenation.[22] Although some "protection" against high viscosity states is provided by the anemia itself, radical increases in blood viscosity are seen with deoxygenation even at these lower hematocrits. When combined with dehydration and infection, such changes would impede cerebral microcirculation and may either initiate or worsen cerebral ischemia.

Diagnosis and Treatment

Stroke should be considered in a sickle cell disease patient who presents with any combination of neurologic symptoms, especially those involving hemiparesis, seizures, or alteration of consciousness. Subarachnoid hemorrhage may be diffi-



Figure 1: Coronal view of a right cerebral infarction using magnetic resonance imaging (MRI). Patient is a 17-year-old male who at the age of 3 experienced acute onset of left hemiplegia.

cult to distinguish clinically from meningitis; however, the CT and lumbar puncture usually provide a definite diagnosis. Although CT may not be positive in early infarction, it is important to rule out other entities such as subdural hematoma and hemorrhage. Angiography should be performed in the setting of intracranial hemorrhage and considered in all stroke syndromes. Despite early concern for its safety in these patients,[29] recent experience indicates that angiographic complications are rare (and usually transient) when the patient is prepared with hydration and the reduction of the hemoglobin S level by transfusion to 30% or less of the total hemoglobin.[13, 14, 16, 19] Evaluation of the heart including echocardiography may reveal related cardiac disease and should be considered.

Although definitive treatment trials have not been performed, the mainstay of treatment has been hydration followed in many centers by a program of hypertransfusion. Hypertransfusion involves partial exchange transfusion designed to maintain the hematocrit at 30 to 34% and the total hemoglobin at 10 to 11 grams/dl, with less than 30% hemoglobin S. The effect of this intervention on the outcome of acute infarction is unknown, but there is evidence that it may prevent recurrent infarctions and stop the progression of stenotic lesions.[13, 16, 19] The required duration of transfusion therapy and the optimal hemoglobin S level have not been determined; programs of 1 to 2 years have been selected attempting to limit the hazards of tissue iron deposition and transfusion related infection. Unfortunately, clustering of recurrent stroke within 1 year after cessation of therapy and recurrent stroke during hypertransfusion therapy at hemoglobin S levels of less than 20% have been reported.[19] There is, as yet, no established role in this population for anticoagulants, antiplatelet agents, or corticosteroids in cerebral infarction not associated with a source of cardiac emboli or massive cerebral edema. A variety of medical therapies designed to inhibit sickling have been studied, but an agent appropriate for extended clinical use is not yet available.[8]

Summary

Stroke in sickle cell disease may present with a variety of central nervous system symptoms, but hemiparesis, seizures, and alteration of consciousness are especially common. The risk for infarction is highest in early childhood, followed by a somewhat lower but more extended risk for intracranial hemorrhage. Although therapeutic options are limited, hypertransfusion should be considered. Further research may provide early identification of groups with the highest risk and improve strategies for prevention and treatment.

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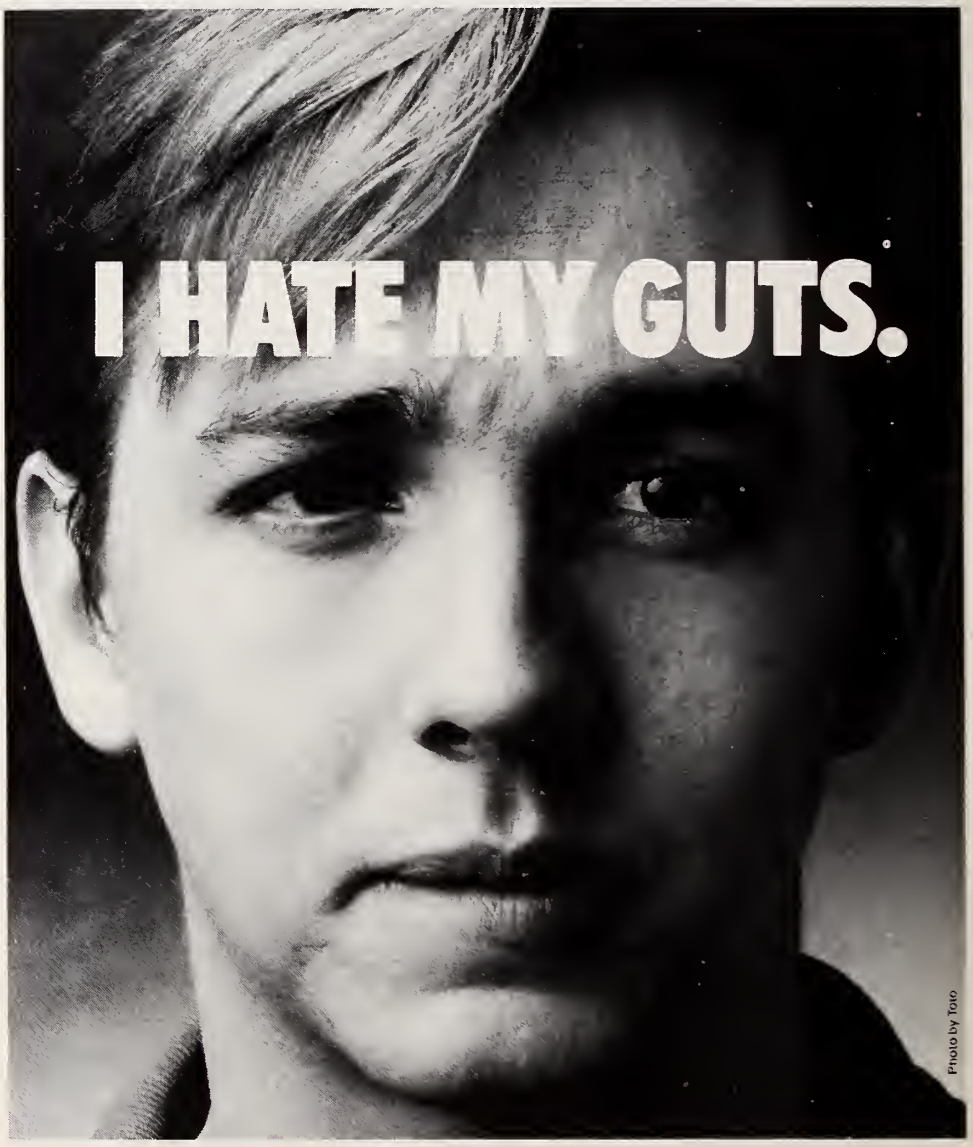
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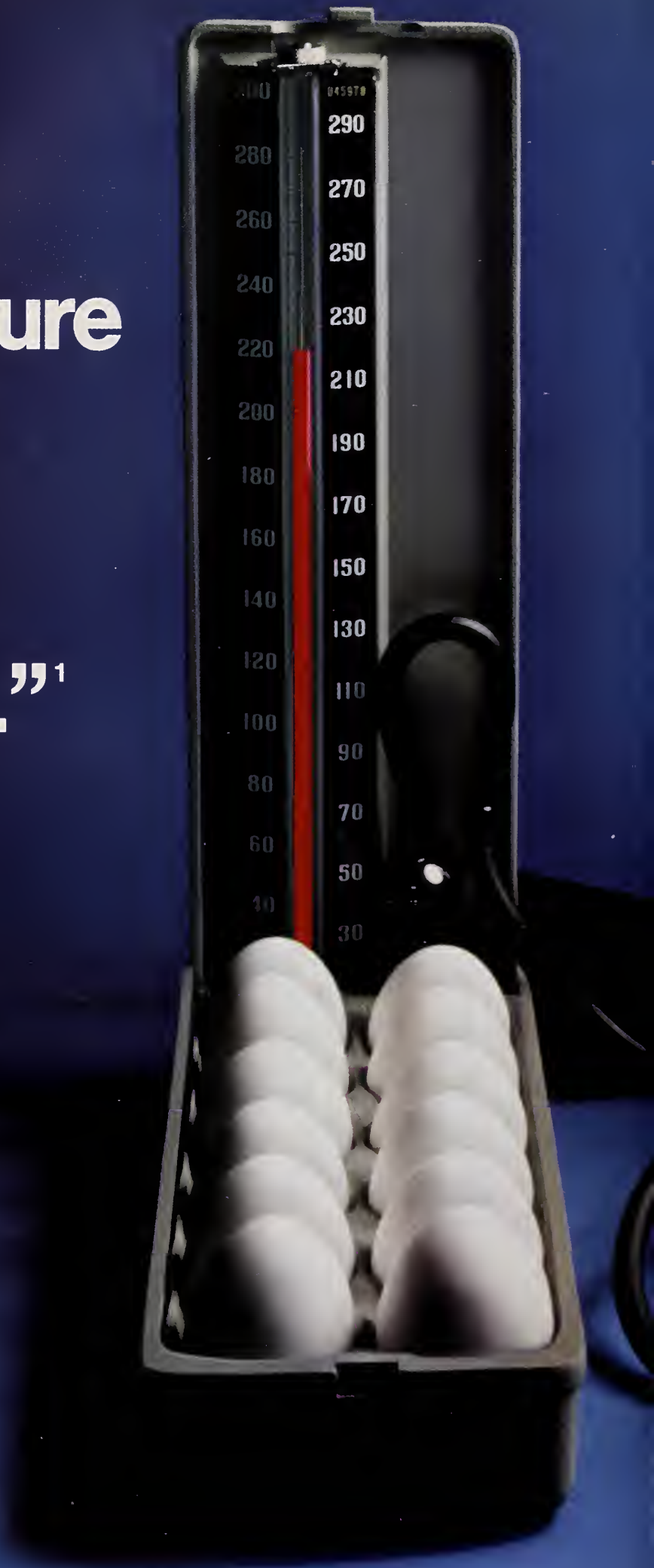
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See important information on following page.

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Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic.

Contraindication: Known sensitivity to the drug.

Precautions: 1. Sedation: Causes sedation or drowsiness in a large fraction of patients. When used with centrally active depressants, e.g., phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2. Patients with vascular insufficiency: Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure. 3. Rebound: Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology.

INFORMATION FOR PATIENTS: Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy. Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly.

LAB TESTS: In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction. In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS: **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e.g., digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials. However, potential for increased sedation when given concomitantly with CNS depressants should be noted.

DRUG/LAB TEST INTERACTIONS: No lab test abnormalities were identified with **Wytensin** use.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e., about 10 times maximum recommended human dose. In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes. No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture. In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY: Pregnancy Category C. WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN. A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg. These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits. However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg). Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg. There are no adequate, well-controlled studies in pregnant women. **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus.

NURSING MOTHERS: Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE: Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S. and is based on data from 859 patients on **Wytensin** for up to 3 years. There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b.i.d.

Adverse Effect	Placebo (%) n = 102	**Wytensin** (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial. Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time. In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20%. Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less: Cardiovascular—chest pain, edema, arrhythmias, palpitations. Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort. Central nervous system—anxiety, ataxia, depression, sleep disturbances. ENT disorders—nasal congestion. Eye disorders—blurring of vision. Musculoskeletal—aches in extremities, muscle aches. Respiratory—dyspnea. Dermatologic—rash, pruritus. Urogenital—urinary frequency, disturbances of sexual function. Other—gynecomastia, taste disorders.

Drug Abuse and Dependence: No dependence or abuse has been reported.

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years. Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both. Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic. Vital signs and fluid balance should be carefully monitored. Adequate airway should be maintained and, if indicated, assisted respiration instituted. No data are available on **Wytensin** dialyzability.

Dosage and Administration: Individualize dosage. A starting dose of 4 mg b.i.d. is recommended, whether used alone or with a thiazide diuretic. Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response. Maximum dose studied has been 32 mg b.i.d., but doses this high are rarely needed.

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HOME HEALTH CARE: ON THE INCREASE

MERLE P. HAZARD, R.N.

A discussion of an increasingly important component of medical care delivery.

HOME HEALTH CARE can be defined as the provision of service by health professionals and other trained personnel, to acutely or chronically ill individuals in their home. Compared to nursing home care, it promotes longevity and increases life satisfaction. It is the least restrictive, most rapidly growing, and least costly segment of health care today.* I think "least restrictive" is self evident and at least for the patient this is true. However, I'm not convinced that it is the least restrictive for the family.

"Most rapidly growing" . . . between 1978 and 1983, the total number of Medicare visits for home health rose nationally from 15.3 million to 30.9 million. Nationally, the average annual percent of increase in home health care reimbursement was 25%. In the State of Georgia between 1978 and 1983, the Medicare average annual percent of increase for home health care was 38% and the Medicare home care visits went from 139,606 to 544,000.

Most home health care patients are elderly. In the Visiting Nurse Association (VNA) of Metropolitan Atlanta, Inc., last year, 78% of our patients were over the age of 65. Thus, Medicare regulations are extremely important in home health care agencies. In the VNA Atlanta in 1983, we saw 4,840 patients; in 1984, 6,031. Our visits in 1983 numbered 95,497; in 1984, there were 133,092. Our budget in 1983 was $4.25 million. In 1984, it was $7 million. So far in 1985, we have seen a 20% increase across the board.

> ***"Home health care in the United States is flourishing. In 1984 alone, there was a 57% increase in the number of Medicare certified for-profit home health care agencies."***

Such rapid, explosive expansion is very costly, even if we think only in terms of recruitment and retention of highly skilled personnel and the backup in administrative and supervisory levels that are necessary. We also can think about the expensive program development to take care of the "sicker" patients we're seeing discharged to home care.

Yes, home health care in the United States is flourishing. In 1984 alone, there was a 57% increase in the number of Medicare certified for-profit home health care agencies. Between 1978 and 1984, proprietary Medicare agencies rose 100%. Voluntary nonprofit home health care agencies, however, have remained the same in number, but their percent of total has decreased from 19% to 10%.

Why has there been such rapid growth in home health care? The answer has to do with money, primarily. DRGs, pre-paid care, is forcing earlier discharge from the hospital to nursing home or home care for Medicare/Medicaid patients. Private insurance and HMOs are following suit. Of the $387.4 billion spent on health care in the United States in 1984, only 3% of it was spent on home health care, while approximately 42% of it was spent on hospital care.

Home health care is less costly than hospital or nursing home care, and therefore it is growing. Let's take a look at the average national cost-per-

This paper was presented at the Georgia Rural Health Association Annual Conference in October, 1985. At that time, Ms. Hazard was Development Representative, Visiting Nurse Association of Metropolitan Atlanta, Inc. Send reprint requests to her at Picture Ridge, Rural Route #4, P.O. Box 63, Metamora, IL 61548-9216.

beneficiary in 1982. For the in-hospital Medicare patient in 1982, the cost was $3,675; for nursing home care, it was $1,710; while for home health care, it was $819. DRGs and the Community Care Act will cause the figures to shift. Hospital and nursing home payments will decrease in ratio to home health care payments. Yet, as patients are discharged "quicker and sicker" from the hospital to home, the Department of Health and Human Services (DHHS) has instituted the most stringent coverage guidelines ever. They also want to change the reimbursement formula from the aggregate to straight visit-cost-per-discipline. The new plan of treatment that HCFA put into effect in September 1985, has set the stage for DRGs in home health care. We are now quantifying exactly the number of visits by discipline and by primary diagnosis. And we are forced to use exquisitely, pin-pointed documentation of patient problems and behaviors to support the need for such visits.

"Members of Congress have stated that to go from aggregate to cost-per-discipline will severely decrease reimbursement at a time when agencies are taking more severely ill patients."

Nursing homes, in the wake of reimbursement cuts, are decertifying nursing home Medicare beds. For example, a fractured-hip patient that just last year was being discharged 5-7 days post-op to a nursing home is today being discharged to home health care if he/she can ambulate 25 feet, transfer alone, and tolerate weight-bearing.

Home health aid visits, the backbone of home health care, are being decreased. While we were seeing 3 and 4 times a week home health aide visits last year, our intermediary has told us that anything other than twice a week is inacceptable. While personal services such as bathing, meal preparation, laundry and socialization are gratis in the nursing home or hospital, they are being curtailed in home health care, even as we are seeing sicker patients.

The length of stay of patients at VNA Atlanta last year was approximately three one-half months. Today, we scarcely expect to have a patient longer than 60 days.

And DHHS wants to change the reimbursement formula from the aggregate to straight cost-per-visit-per-discipline. This will mean a revenue loss for home health care agencies. The aggregate formula allowed balancing out of costs. For example, nursing visits that may run above the caps could be balanced out by home health aide visits running below the caps when lumped together in the aggregate formula. However, straight cost-per-discipline will reimburse the nursing visit that is running above the caps at a lower level (at the cap level), and the home health aide visits that run below the cap will be reimbursed at cost. Therefore, revenue loss for each discipline can be expected.

Members of Congress have stated that to go from aggregate to cost-per-discipline will severely decrease reimbursement at a time when agencies are taking more severely ill patients. The Senate Finance Committee supports this position and has now sent the issue to the House Ways and Means Committee for action. All of the Georgia delegation are on record as supporting reimbursement in the aggregate. However, if the new DHHS formula is not denied, the straight cost formula will be retroactive to July 1, 1985.

The President of the National Association for Home Care (NAHC) predicts that hundreds of agencies will drop out of Medicare if Congress doesn't step in. And it is thought that over 70% of home health care agencies will see a negative effect from such a shift in reimbursement formula.

Home health care agencies today are not only feeling a squeeze by government and insurance companies, they also feel it in the form of competition. As noted, the number of home health care agencies is increasing, and there is increasing pressure on states to eliminate the Certificate of Need. Our traditional referral sources are our competition today.

"The* Wall Street Journal *carried an editorial . . . calling for dismantling of the Medicare system and going to a voucher or straight payment-per-beneficiary system."

That is the physician, the hospital, durable medical equipment supplier, and pharmaceutical house. Survival and competition for home health care agencies means learning new approaches, such as marketing, advertising and sales, and attacking competitors at their weakest spots. For to win or even remain alive in the future will mean to provide quality care at the lowest cost.

The *Wall Street Journal* on October 9, 1985, carried an editorial by a physician from Stamford calling for dismantling of the Medicare system and going to a voucher or straight payment-per-beneficiary system. Medical economists predict that, down the road, most health care will be a pre-paid system. Medicare, Medicaid, and private insurance will follow along the route that HMOs have taken. Medi-Cal (the California Medicaid System) is already operating in this vein and purchases the care for their patients from an HMO. It is felt that 90% of the business will be capitation, contract and bid rather than fee-for-service. Retaining and recruiting a patient population and con-

trolling the payment source is truly the wave of the future. One has only to look at the HMOs becoming national organizations and the multihospital systems buying insurance companies and HMOs to know that this is true.

The next 5 or 10 years will be the shake out period. Voluntary non-profit agencies will have to back away a little from their "White Knight Syndrome" and rethink their position to avoid becoming the dumping ground for the indigent patient. As competition forces cost down, competitive advantages will be gained by price, quality, convenience, and packaging of health care. We may even see ourselves in a tiered system of care: good, better, and best.

This is rather a razzle-dazzle concept for some of us, I suspect. And there may be alternative ways of delivering care at lower costs. Let's think for a moment that the Georgia Nurses Association (GNA) is supporting legislative action for third-party reimbursement to nurses. That may be one way of effecting a change which supports quality care at a lower cost.

Patients are truly going to become the consumers. And they'll need to be educated. Eventually, it is they who will decide what care to purchase, and they will buy what they can afford and what they have been educated to believe they need.

"Home health care agencies are going to have to come out of their cocoon of isolation and become full partners in the health care system."

Now, the second issue; "How will we be able to care for the tragic, chronically acute patient at home?" These are the ventilator patients, the trach babies with single moms, quadriplegics, and so forth.

I think there are two central issues operating here: the availability of resources and the allocation of resources. Third-party payors do not continue reimbursement for this care over extended periods of time. Such care is labor intensive and very costly. Think only of the qualifications necessary for the providers, the amount of time spent on care delivery, and the effort to coordinate service of perhaps four or five agencies. Caring for such patients also may involve denying care to other patients. Conflict is involved in all aspects of such care delivery.

Leslie Rothenburger, Assistant Professor of Medicine and Director of Medical Ethics Program, UCLA School of Medicine states, "Today's technology enables us to prolong life in such a way that we may actually increase suffering. Confronting these dilemmas involves reconciling the values of the patient, the values of the physician, the policies of the hospital and the laws of the state."

I would like to amend Dr. Rothenburger's comments to include the values of the nurse, the policies of home health care agencies, and the policies of the third-party payor. Third party payors today include the self-insured businesses who make decisions on who will receive costly high-technology care.

Emerging ethics committees work to resolve conflicts in the institutional setting while individuals express their values in ways such as living wills, euthanasia, enabled suicide, and even robbery to pay for the cost of high-tech care. Many cases involving unresolved conflict are being discharged to home health care. After decisions are made to support life, even in the extreme, the world of money enters and discharge to home care is an increasing viable option.

Families are called upon today to provide very complicated care as well as to give emotional and financial support. And these family systems are strained to the breaking point. I think of a 16-year-old young man, a C-2 cord injured quadraplegic patient that went home on a ventilator. And I remember seeing his family just break apart at the seams under the burden. I think, too, of the babes with trachs that are going home with single moms to care for them — moms looking at giving up employment to stay home and care for a baby that no day care center will take care of.

The home care nurse is managing such care. Whether she's a private duty or a visiting nurse, she's spending enormous amounts of time with such patients and families. Caring for these patients over extended periods, when she has had no input into dilemma resolution, only adds to her burden.

"It is truly an exciting, frustrating, perplexing, exhausting, and challenging time to be involved in home health care."

What's ahead, then, for home health care agencies in this area?

Well, for one thing home health care agencies are going to have to come out of their cocoon of isolation and become full partners in the health care system. They will strive to work with others in developing therapeutically safe, workable home care programs for these tragic patients. And lastly, they will establish their own in-house ethics committees to make decisions on acceptance of such tragic patients.

It is truly an exciting, frustrating, perplexing, exhausting, and challenging time to be involved in home health care. Some say that the system has come full circle; that is, back to where our grandmothers were with most care being delivered at home. However it may appear, one segment can ill afford to divorce itself from another in health care. What we each learn of the whole, we can take back to our own arena to rethink, reshape, and reapply. We can become change agents for healthy growth. ■

Smokeless Tobacco: A Problem for Health Professionals and Educators

John T. West, M.D.

"Some persons who do not know any better — or who simply do not care — have recently advocated smokeless tobacco as a no-health-risk alternative to smoking."

WHILE CIGARETTE SMOKING in the United States has declined in recent years, smokeless tobacco has become the growth part of the tobacco industry — and a big problem for health professionals and educators.

The convincing evidence of the serious health consequences of cigarette smoking, the publicity that this has generated, and the wide public acceptance of these facts have had a significant impact on the smoking habits of Americans. The resulting health gains from decreased smoking have been gratifying. For example, the reduction in deaths due to lung cancer in California physicians has been reliably attributed to the reduction in cigarette smoking by these physicians in the period 1950-1979.[1] It is also believed that recent decline in deaths from coronary artery disease in the United States is due in large part to the reduction in cigarette smoking. Public policy and public opinion have aided in bringing about these health gains. Public policy has limited cigarette advertising, has required warning labels on cigarette packs, and has restricted areas in which smoking is permitted in public places. Public opinion has not only supported these actions but also has often called for even more vigorous programs to curtail smoking. As a result, we may expect further improvement in health in other areas where cigarette smoking is damaging, e.g., in chronic obstructive pulmonary disease, peptic ulcer, cancer of other portions of the upper aero-digestive tract and of the pancreas, prostate, and bladder.

Some persons who do not know any better — or who simply do not care — have recently advocated smokeless tobacco as a no-health-risk alternative to smoking. Perhaps we should expect nothing better from professional athletes who, after all, make their pitch for smokeless in the interest of personal profit. But for health professionals and educators, a different standard is appropriate. The knowledge of the serious health threats of smokeless tobacco are well known, and we have an obligation to make sure that health education and public policy provide the same protection from the hazards of smokeless as was deployed against cigarette smoking.

These are the important facts.

- Smokeless tobacco (snuff and chewing tobacco) causes serious periodontal disease.[2]
- Smokeless tobacco causes elevation of the blood pressure,[3] and its use over many years may therefore be expected to increase the risks of those conditions arising from hypertension, including coronary heart disease and stroke.
- Smokeless tobacco is the major cause of cancers of the oral cavity and pharynx in the United States, and a significant risk factor for cancer of the larynx and esophagus.

Dr. West is a general surgeon. Send reprint requests to him at 301 Medical Dr., Ste. 503-504, LaGrange, GA 30240.

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- The nicotine in smokeless tobacco is just as strongly addictive as that in smoking tobacco.
- The metabolic derivatives of nicotine, aromatic hydrocarbons, and nitrosamines in smokeless tobacco are the causes of most of the health problems arising from tobacco usage. Radioactive Polonium 210 in smokeless tobacco may add to the carcinogenic effect.
- In areas where the use of smokeless tobacco has been prevalent for many years (as in rural Georgia), cancers of the oral cavity and pharynx are among the most commonly seen cancers. (For example, in LaGrange, Georgia, in the years 1967-71 cancer of the oral cavity and pharynx was the second most common cancer.)[4]
- Cancers of the oral cavity and pharynx resulting from smokeless tobacco are most difficult to control because of the wide field effect of the responsible carcinogens and the srong likelihood of local recurrence or a second primary cancer.[5]
- Even when treatment is successful in controlling cancers of the oral cavity and pharynx, the functional loss and the cosmetic result may be hard to bear.
- The sickness and/or death resulting from uncontrolled cancer of the oral cavity and pharynx are most miserable.

It is most important that we gain the active support of educators, especially coaches, in discouraging the use of smokeless tobacco by our young people. We will have to work hard to counter the major promotion of the product that the tobacco industry directs at youth. It will not be easy to defeat the persuasive testimony and the seductive invitation to enjoy a little chew when it comes from famous rodeo cowboys, fullbacks, and country and western singers. But informed educators and coaches in many areas have already taken effective action. For example, the LaGrange School System prohibits the use of tobacco in any form, smokes or smokeless, on school premises by students or faculty. This is especially noteworthy and admirable when contrasted with the reported coaches' promotion of the use of smokeless tobacco by the athletes in some Georgia schools. When one recognizes the serious long term health consequences of smokeless tobacco, such an action by an influential adult must be considered a most deplorable abuse of our young people by an ignorant and/or un-caring adult. This should not be tolerated by any school system.

We have the facts.

For the health professional, the educators, and for those formulating public policy, it is our responsibility to do something about it.

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"It is most important that we gain the active support of educators, especially coaches, in discouraging the use of smokeless tobacco by our young people."

Mechanical Cardiac Assist Devices for the Failing Heart

G. Lionel Zumbro, M.D., Gail Harville, R.N., Susie Towner, R.N.

NEARLY ONE MILLION people have myocardial infarctions each year. Patients who reach the coronary care unit rarely die of arrhythmias, leaving cardiogenic shock as the most common cause of hospital mortality. Survival and prognosis following myocardial infarction are in part related to infarct size and severity of left ventricular dysfunction. If myocardial damage could be limited or reversed, patient survival would improve.

Intra-aortic balloon counterpulsation appears to reduce infarct size; however, this technique has not resulted in increased patient survival.[1] Improved survival could depend upon more complete mechanical support which may be provided by various blood pump assist devices. Theoretically, these pumps limit infarct size by allowing the heart to rest, which permits metabolic recovery for areas of myocardium not irreversibly damaged. Recently, there has been increased interest in utilizing a variety of paracorporeal pumps to assist the failing heart when conventional support (pharmacologic and intraaortic balloon pump) fails. Generally, these pumps are of three types (Table 1) and are placed outside the body (paracorporeal); differing from the total artificial heart pump, which is inserted inside the body (intracorporeal).

Table 1: Types of Ventricular Assist Pumps

A. Roller Pump
B. Centrifugal pump — Biomedicus,* Centrimed†
C. Sac or diaphragm pump — Thoratec,‡ Sarns,§ Symbion¶

*** Biomedicus Inc., Eden Prairie, Mn.**
† Centrimed Corporation, Hopkins, Mn.
‡ Thoratec Medical, Inc., Berkeley, Ca.
§ Sarns Inc., Ann Arbor, Mi.
¶ Symbion Inc., Salt Lake City, Ut.

Attempts have been made to support or substitute for the function of the right and left ventricles by paracorporeal pumps since the late 1950s. Liotta *et al.*[2] reported the first clinical use of a left heart assist device in 1963. Several investigators, including us, have subsequently employed ventricular assistance successfully.[3-6] Historically, devices were first applied as temporary pump assistance for shock due to myocardial infarction.[7] These trials, which took place in the early 1960s, met with limited success.[7] Left ventricular assist was first used successfully for postoperative low cardiac output by Spencer in 1964 and DeBakey in 1966.[3, 8] Temporary cardiac support devices are currently used clinically when myocardial injury is potentially reversible. Reversible conditions for which ventricular assistance is indicated are listed in Table 2.

Table 2 — Indications for Ventricular Assist Device

1. **Postop cardiac surgery shock**
2. **Bridge to cardiac transplantation**
3. **Myocardial Infarction shock**
4. **Myocarditis, acute with shock**
5. **Reversible cardiac trauma**
6. **Failing transplanted heart**

Only temporary ventricular assist devices are approved for clinical trials at the present time. Clinical trials with permanently implantable ventricular assist devices are expected within 3 to 5 years and ultimately will play a major role in the therapy of terminal congestive heart failure. Two types of ventricular assistance (roller pump and centrifugal pump) are readily available to all cardiac surgical teams but are not approved for use beyond a few hours. The sac or bladder type pump

Dr. Zumbro is from the Georgia Heart Institute of University Hospital and is Assistant Clinical Professor of Surgery, Medical College of Georgia, Augusta, GA. Ms. Harville and Towner are nurse coordinators of Georgia Heart Institute Cardiac Transplant and Mechanical Cardiac Assist Programs, University Hospital, Augusta, GA. Send reprint requests to Dr. Zumbro, 820 St. Sebastian Way, Ste. 2-D, Augusta, GA 30902.



Figure 1 — Thoratec Pierce-Donachy pneumatic blood pump

is expensive and intended for long-term use and only available at a few centers conducting clinical trials.* This sac type pump is made of durable thromboresistant materials intended for long-term use. The Georgia Heart Institute of University Hospital is one of approximately 10 centers in the United States currently approved to conduct clinical trials with the Thoratec Pierce-Donachy pneumatic sac pump. Further advantages and disadvantages of each device remain to be clarified.

We have the greatest experience with ventricular assistance following cardiac surgery; however, we have extended this therapy to include other clinical groups.[4] Our current preference is for the Pierce-Donachy device which employs an extracorporeally placed pneumatic pump (Figures 1 and 2). It is a flexible segmented polyurethane sac, which is seam free with a smooth polyurethane surface, and is enclosed in a rigid polysulfone case. Two Bjork-Shiley tilting disc valves are used to assume unidirectional flow. Blood is taken from the left atrial appendage utilizing a 51 F Sarns angled cannula coated with a segmented poly-urethane-woven 14mm Dacron prosthesis. Right ventricular assistance is provided by right atrial inflow cannulation, while the outflow conduit is anastomosed to the pulmonary artery. Both pumps can be employed if

* Thoratec Medical Incorporated, Berkeley, Georgia

"The rationale for ventricular assistance relies on the demonstrated ability of the myocardium to recover metabolically, thus limiting myocardial damage when allowed to rest during ventricular assistance."

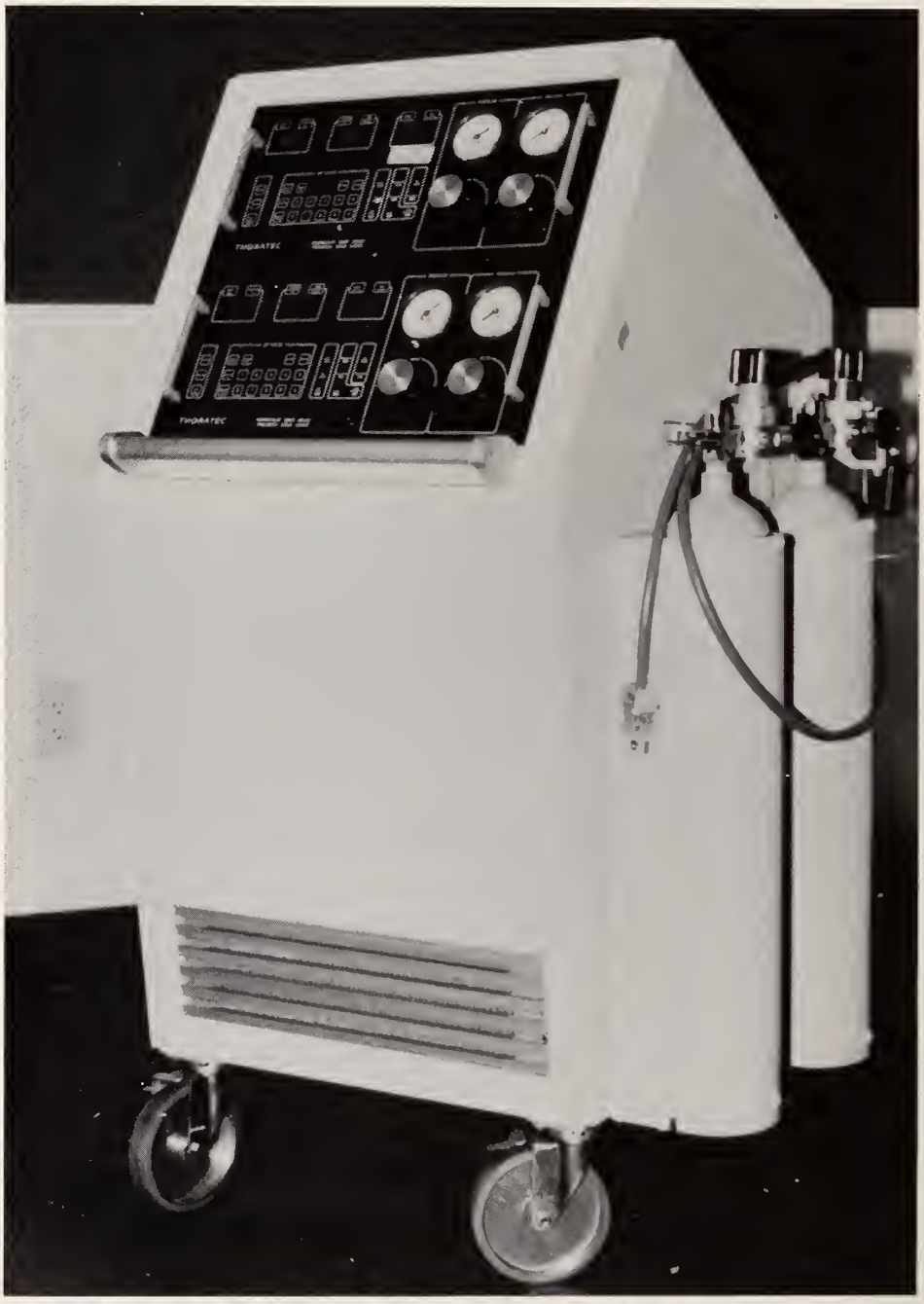


Figure 2 — Computerized pneumatic drive console for Thoratec pump.

biventricular assistance is required‡ (Figure 3). We have assisted 20 patients with a centrifugal pump† and 4 patients with the Pierce-Donachy pneumatic pump.‡ Overall survival is approximately 30 to 50%.

Ventricular assistance offers hope to many patients with endstage cardiac disease which could be reversible and whose only alternative is certain death (Table II).[5, 6, 9, 10] The most frequent use of ventricular assistance has been in the post cardiac surgical patient who cannot be separated from cardiopulmonary bypass.[5, 10] Bridging to transplantation for the deteriorating cardiac recipient is becoming a more

† Thoratec Medical Incorporated
‡ Biomedicus Incorporated

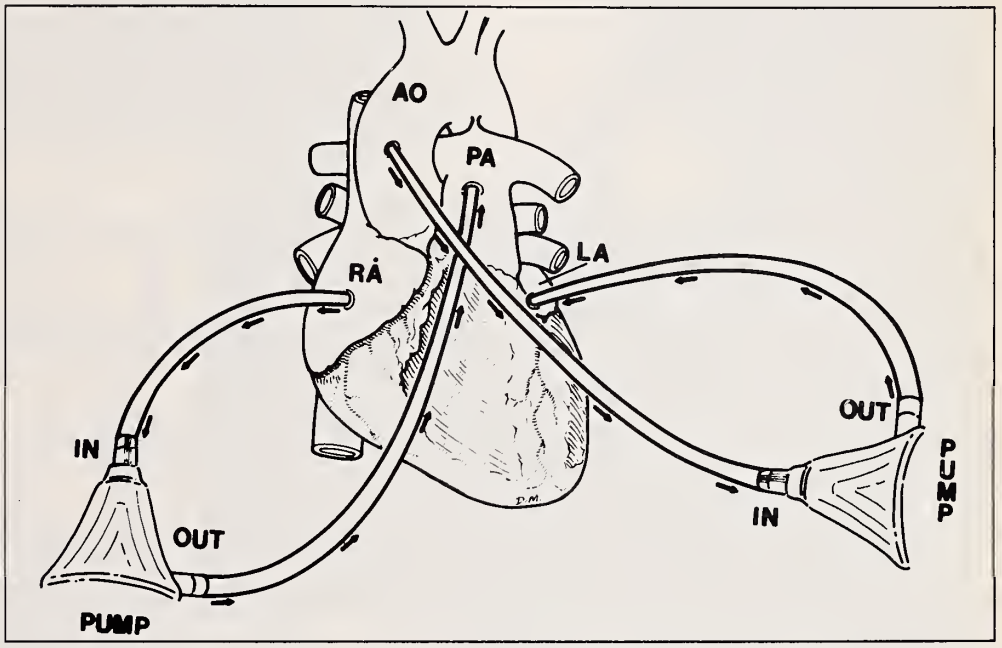


Figure 3 — Biventricular assistance with inflow and outflow cannulation of left and right heart. Centrifugal type pumps are shown.

frequent indication for temporary ventricular assistance. Ventricular assistance for cardiogenic shock following myocardial infarction offers great potential for salvaging a large number of patients in the future.[9]

Conclusions

In the future, the indications for use of ventricular assistance are likely to be expanded and will include shock following myocardial infarction, myocarditis, and cardiomyopathy.[11] Approximately one million people have myocardial infarctions each year; the greatest potential use of ventricular assistance is in this group.[9] The rationale for ventricular assistance relies on the demonstrated ability of the myocardium to recover metabolically, thus limiting myocardial damage when allowed to rest during ventricular assistance.

Although long-term survival rates have been low (30 to 50%), we have been impressed with the ability of the myocardium to recover in many patients. Earlier application, prior to multiple organ failure and extensive irreversible myocardial damage, may lead to more frequent survival.

" "Ventricular assistance offers hope to many patients with endstage cardiac disease which could be reversible and whose only alternative is certain death. " "

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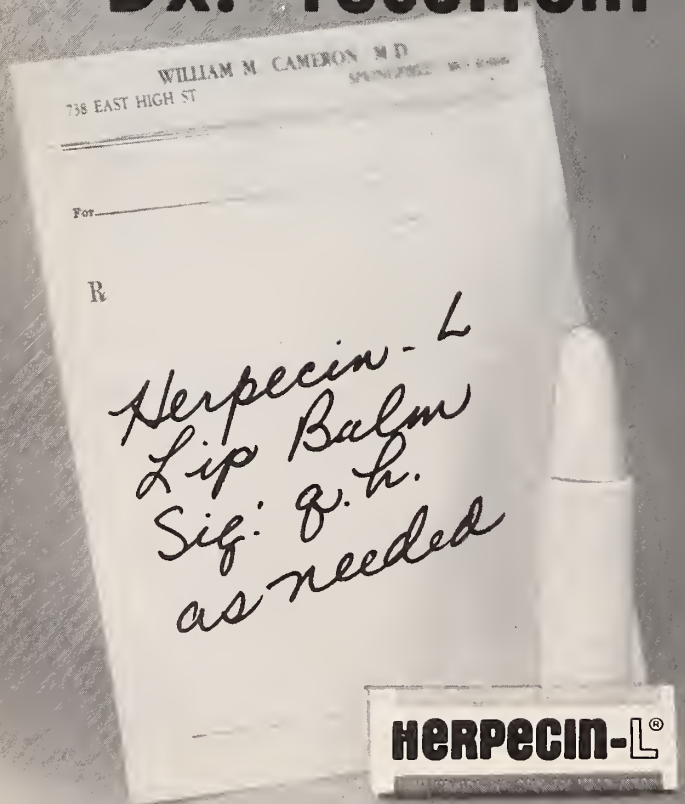
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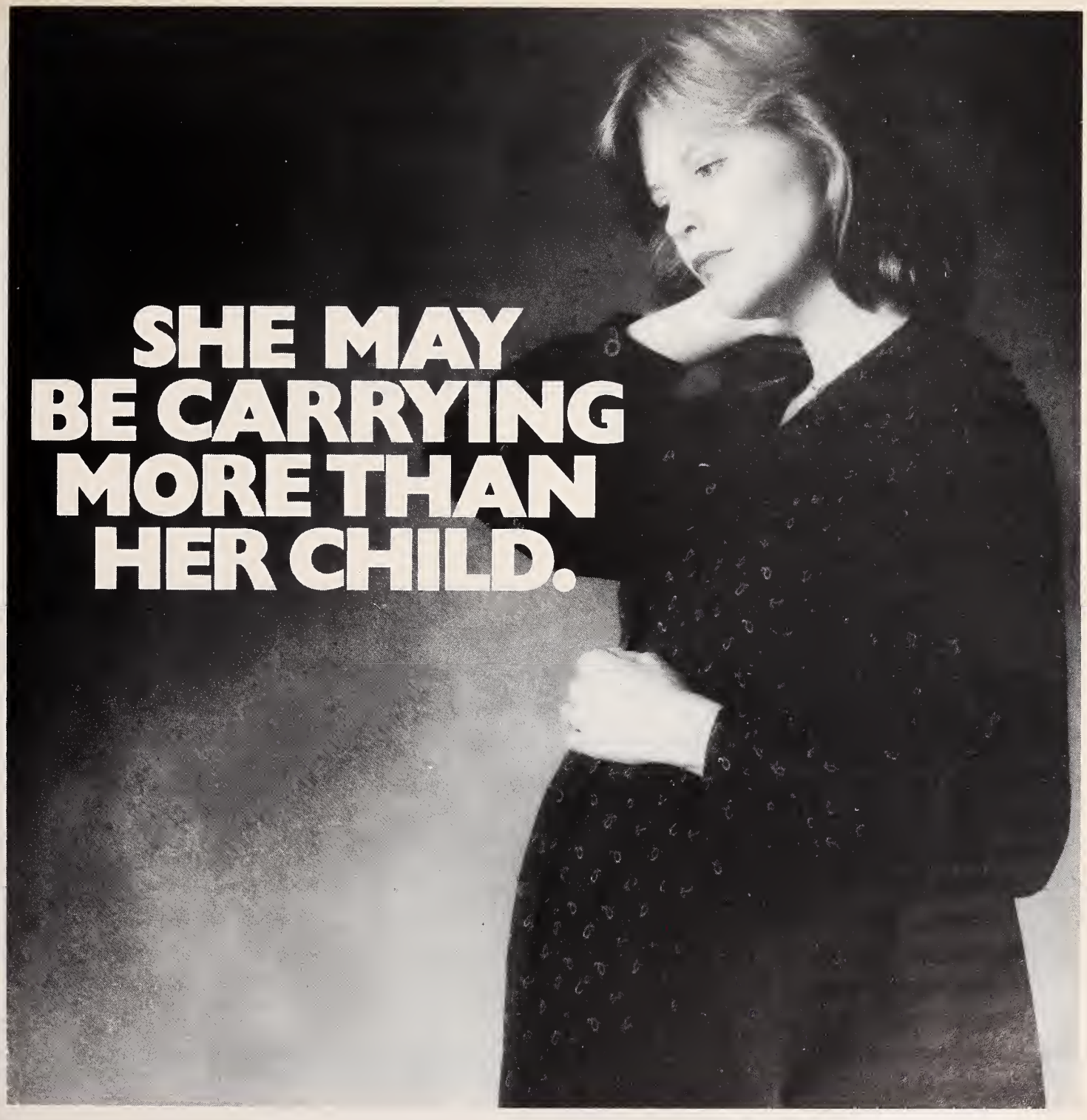
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*Passive Smoking: Private and Public Responses**

David B. Poythress

"As passive smoking continues to become more socially objectionable . . . nonsmoking plaintiffs will doubtless continue to develop creative theories to protect their interest in a smokeless environment."

PRIVATE OBJECTION to smoking is nothing new; it has been roundly criticized by no less figures than James I. Goethe and the *New York Times*.[1] In his 1604 pamphlet, *A Caunterblaste to Tobacco,* King James called smoking "stinking and unsavory."[2]

Public objection, in the form of restrictive legislation, is not new either. Numerous prohibitions, usually at the municipal level, were adopted in the 19th century and were usually justified on the basis of the threat of fire.

Ordinances flatly prohibiting smoking were routinely struck down as unwarranted encroachments upon individual liberties.[3] But by the early 20th century, it was clearly established that the prohibition of smoking in public places and public means of transportation is a legitimate exercise of state governments' police power. The interest to be protected, of course, is the comfort and health of nonsmokers.[4]

Since publication of the Surgeon General's Report in 1972, the vast majority of states have passed legislation that attempts to deal with the problem of passive smoking. Although the nature of the regulation varies widely, the statutes at a minimum typically prohibit smoking in some or all public places. The Georgia statute, for example, prohibits the smoking of tobacco in any form in any elevator, means of public transportation, or "any area which is used by or open to the public."[5] The maximum penalty for violation is only a $100 fine and the statute is further weakened by the requirement that the area be "clearly designated by a no-smoking sign," which effectively places the issue under the control of the person in charge of the property.

The law as it relates to private objection to passive smoking has likewise developed to a level of complexity far beyond the monarch's personal outcry. Conflict among employees about smoking in the workplace has been the source of much of the litigation. And in a line of

* *This article deals only with passive smoking by nonsmokers. It does not deal with the peculiar, emerging issue of* smokers' *rights against tobacco companies and others for health problems resulting from their voluntary use of tobacco. As early as 1980, a products liability theory of recovery was articulated. Garner,* Cigarette Dependency and Civil Liability: A Modest Proposal, *53 S. Cal. L. Rev. 1425 (1980). And in 1985, in a celebrated but not officially reported California case, such a claim by a cancer victim was decided in favor of the tobacco company.*

Mr. Poythress is MAG's General Counsel.

ases dating from 1978, unhappy onsmokers have asserted increasingly reative theories of liability, usually gainst the employer and usually with uccess.

The seminal case is *Shimp v. New ersey Bell Telephone Co.*[6] which held nat an employee has a common-law ight to a work area free from unsafe onditions which includes tobacco moke. The court ordered the mployer to provide a smoke-free vorking environment, but allowed moking to continue in the employee unchroom.

In two subsequent cases, separate ourts held that smoking does not onstitute a battery against a passive ionsmoker,[7] and that there is no ndividual cause of action under the Occupational Safety and Health Act to njoin an employer from allowing moking in the workplace.[8]

But in *Smith v. Western Electric,*[9] he Missouri Court of Appeals took the ationale of *Shimp* one step further. Smith, like Shimp, was allergic to obacco smoke and continued to xperience serious health problems notwithstanding the company's efforts o locate her in a smoke-free nvironment. The court held that Smith was entitled to her injunction; no accommodation was made for nonsmokers, as was made in *Shimp,* nd the court implied that cigarette moke is *per se* an unsafe working ondition.

In *Parodi v. Merit System Protection Board,*[10] a federal employee who was highly allergic to smoke applied for disability retirement, contending that smoke in her workplace made her ill and unable to work. The U.S. District Court held that the plaintiff was entitled to work in a smoke-free environment and if the agency was unable to provide it then the employee was entitled to disability retirement.

The plaintiff in *Vickers v. Veterans Administration,*[11] was also allergic to smoke. He claimed protection as a handicapped person under the Rehabilitation Act of 1973, contending that his employer was discriminating against him by not prohibiting smoke in the building where he worked. The court's opinion did not explictly resolve the issue of whether the plaintiff was a "handicapped person," but denied relief, finding that the VA had not discriminated against him and had made a good faith effort to deal with the whole problem of passive smoking.

And in what may be the most expansive holding yet on this subject, the California Court of Appeals in *Hentzel v. Singer Co.* held that an employee was entitled to recover damages for emotional distress inflicted by his employer who fired him in retaliation for his persistent complaints about smoke in the workplace.[12] This case is noteworthy for two reasons. It is one of a very few cases in which passive smoking resulted, albeit indirectly, in the recovery of money damages. Perhaps more important, it may be the first case in which a winning plaintiff made no allegation of a specific health problem or of hypersensitivity to smoke.

As passive smoking continues to become more socially objectionable, and its dangers become more widely understood, nonsmoking plaintiffs will doubtless continue to develop creative theories to protect their interest in a smokeless environment. ■

Notes

1 Nonsmokers' Rights, 26 Wash. U. J. of Urban & Contemp. L., 211-31 (1984).

2 Smoking in Public: This Air is My Air, This Air is Your Air, S. Ill. U. L. J., 665-86 (1984).

3 *City of Zion v. Behrens,* 262 Ill. 510, 104 NE 836 (1914); *Hershbery v. City of Barbourville,* 142 Ky. 60, 133 SW 985 (1911).

4 *Supra,* Note 1.

5 O.C.G.A. 16-12-2.

6 145 N.J. Super. 516, 368 A.2d 408 (App. Div. 1976)

7 *McCracken v. Sloan,* 40 N.C. App. 214, 252 SE2d 250 (1979)

8 *Federal Employees for Non-Smokers' Rights (FENSR) v. U.S.* 446 F.Supp. 181 (D. D.C. 1978).

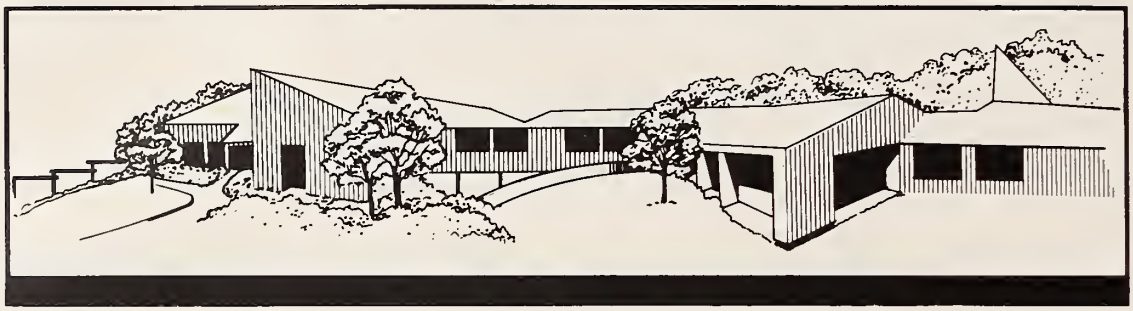
9 643 SW2d 10 (Mo. Ct. App., 1982).

230 690 F2d 731 (9th Cir., 1982)

11 549 F Supp 85 (W. D. Wash., 1982)

12 138 Call.App.3d 290, 188 Cal. Rptr. 159 (1982).

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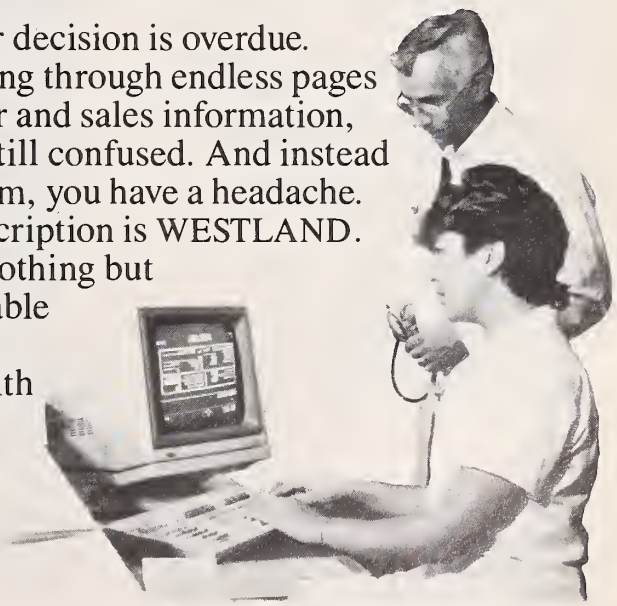
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Mathew, Kandathil M., Clayton-Fayette — Act — CD/IM
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ERSONALS

ird District



Dr. Noah D. Meadows, Jr., (left) received one of the 1986 Governor's Awards in the Arts from Joe Frank Harris.

Internist **Noah D. Meadows, Jr., .D.,** was an honored recipient of the 986 Governor's Awards in the Arts, coming the first winner from Cobb the 13-year history of the estigious awards. Sponsored by the eorgia Council for the Arts, the ward recognized outstanding ntributions made by individuals and ganizations to the arts in Georgia. r. Meadows has been active as a board member of the Marietta/Cobb Fine Arts Center and the Annual Kennesaw College/Cobb Symposium that brings to the county gifted individuals who share their expertise in various fields with the community. In 1983, Dr. Meadows was presented the Lillian Bennett Sullivan Award by the Cobb Arts Council and Kennesaw College for service to the arts.

Fourth District

LaMar McGinnis, M.D., was recently installed as president at the Spring Meeting of the Georgia Chapter of the American College of Surgeons. Dr. Eugene Davidson was elected as President-elect. Robert B. Smith, III, M.D., of Atlanta, will continue his position as Treasurer and Ellis B. Keener, M.D., will continue as Secretary.

Fifth District

Michael Allen Haberman, M.D., was recently named chief of staff for 1986 at West Paces Ferry Hospital in Atlanta. Dr. Haberman is president of the Georgia Chapter of the American Association of Psychiatric Administrators, and a member of the Board of the Georgia Pyschiatric Association.

A Fellow of the American Academy of Pediatrics, **Michael K. Levine, M.D.,** is one of the first recipients of the Academy's Pediatrics' Review and Education Program award. He has been active in the PREP program since its inception in 1979. The award was established to recognize members of the Academy who have actively participated in the program for 6 consecutive years.

Sixth District

Milton I. Johnson Jr., M.D., has been appointed as staff physician at Carl Vinson VA Medical Center in Dublin. He was previously in private practice in Macon for almost 25 years. Dr. Johnson is a Diplomate of the American Board of Family Practice and Fellow of the American Academy of Family Physicians. During his career, Dr. Johnson has served as president of the Medical Association of Georgia and the Georgia Academy of Family Physicians, as chairman of the Joint Board of Family Practice of the State of Georgia, and as a member of the Georgia State Medical Education Board.

Garnet Giesler, M.D. has been installed as president of the Georgia Thoracic Society. Dr. Giesler is a pulmonologist at Clark-Holder Clinic and medical director of the Department of Pulmonary Medicine at the West Georgia Medical Center. He is a member of the Board of Directors of the American Lung Association of Georgia, a former member of the Board of Trustees of West Georgia Medical Center, and serves on the Board of Directors of Clark-Holder Clinic.

John B. Savage Jr., M.D., of Macon, has been inducted as a Fellow of the American Academy of Orthopedic Surgeons.

DEATHS

James Brantley, M.D.

James Brantley, a general surgeon from Jesup, died in March. Dr. Brantley was a graduate of Emory University Medical School. After serving 2 years at the U.S. Army Hospital in Fort Jackson, S.C., Dr. Brantley joined the medical staff of Wayne Memorial Hospital in 1971. He served as a member of the Hospital Authority of Wayne County from 1974 to 1977 and served as Chief of the Medical Staff from July 1977 to July 1978. Dr. Brantley is survived by his wife and three children.

Amey Chappell, M.D.

Amey Chappell, an obstetrician and gynecologist from Atlanta, died in March. She was a former president of the American Women's Medical Association. She was also president of the Young Women's Christian Association of Metropolitan Atlanta in 1971. Oglethorpe University, her alma mater, awarded Dr. Chappell an honorary doctorate in 1984.

QUOTES

I would not exchange my leisure hours for all the wealth in the world.
MIRABEAU

What is defeat? Nothing but education; nothing but the first step to something better.
WENDELL PHILLIPS

Blessed is the person who sees the need, recognizes the responsibility, and actively becomes the answer.
WILLIAM ARTHUR WARD

It is well to treasure the memories of past misfortunes; they constitute our bank of fortitude.
ERIC HOFFER

The conduct of man depends upon temperament, not upon a bunch of maxims.
BENJAMIN DISRAELI

All things are difficult before they are easy.
THOMAS FULLER

Destiny is not a matter of chance, it is a matter of choice; it is not a thing to be waited for, it is a thing to be achieved.
WILLIAM JENNINGS BRYAN

There is always an easy solution to every human problem — neat, plausible and wrong.
H. L. MENCKEN

Men who are rich have times when they don't listen. Men who are quite bright have times when they don't listen. Men who are both bright and rich always *listen. That is how they got the money, and that is how they keep it.*
JOHN D. MACDONALD

The human condition is such that pain and effort are not just symptoms which can be removed without changing life itself; they are rather the modes in which life itself, together with the necessity to which it is bound, makes itself felt. For mortals, the "easy life of the gods" would be a lifeless life.
HANNAH ARENDT

Take love away from life and you take away its pleasures.
MOLIÈRE

Defeat never comes to a man until he admits it.
JOSEPHUS DANIELS

Agreement makes us soft and complacement; disagreement brings out our strength. Our real enemies are the people who make us feel so good that we are slowly but inexorably pulled down into the quicksand of smugness and self-satisfaction.
SYDNEY J. HARRIS

Blessings are not valued until they are gone.
THOMAS FULLER

Give to the world the best that you have and the best will come back to you.
MADELINE BRIDGES

To be trusted is a greater compliment than being loved.
GEORGE MACDONALD

He that has truth in his heart need never fear the want of persuasion on his tongue.
JOHN RUSKIN

Learn to distinguish the difference between errors of knowledge and breaches of morality.
AYN RAND

Source: *Forbes*

Physician Recognition Award Recipients

LISTED BELOW *are those physicians in Georgia who have earned the AMA's Physician's Recognition Award (PRA) from January through March, 1986.*

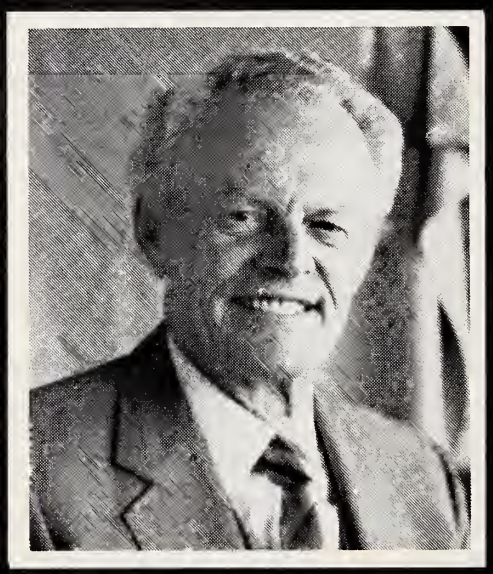
The Award was established by the AMA House of Delegates in 1968 "to recognize, encourage, and support physicians who participate regularly in continuing medical education and to emphasize the importance of developing more meaningful continuing medical education opportunities for physicians." A minimum of 150 credit hours of CME must be earned over a 3-year period to qualify for the Award. The hours may include such activities as conferences, residencies, teaching, writing, private reading, listening to cassettes, home study courses, consultation, and peer review; at least 60 of the hours, however, must be from formal CME programs sponsored or co-sponsored for Category I credit by organizations accredited for these activities.

We congratulate the following physicians who have distinguished themselves and their profession by their commitment to continuing education:

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Alejandro R. Alam, Atlanta
James M. Alday, Gainesville
Daniel J. Appelrouth, Atlanta
Jack M. Bates, Gainesville
J. Roberto Bejarano, Milledgeville
Elbert H. Brown, Warner Robins
Luther E. Brown, Macon
John H. Burson, Carrollton
Gordon C. Carson, Atlanta
Cynthia Cohen, Atlanta
Rudolf A. Colmers, Savannah
Richard S. Colvin, Atlanta
William G. Cutts, Canton
Glenda H. Davis, Nashville
Henry G. Davis, Sylvester
J. Arturo Delgado, Milledgeville
Mercedes L. Delgado, Norcross
James F. Densler, Atlanta
Jimmy L. Dixon, Brunswick
Brendan T. Finucane, Atlanta
Sumner Leon Fishbein, Augusta
Leroy R. Fullerton, Martinez
Paul D. Gauthier, Jeffersonville
Theodore Geffen, Savannah
Charles R. Gershon, Atlanta
Edwin S. Gerson, Riverdale
Charles B. Gillespie, Albany
William W. Goodhue, Ft. Gordon
Donald F. Grady, Atlanta
William E. Gray, College Park
W. David Hammad, Atlanta
Maurice D. Harris, Decatur
Thomas S. Harrison, Decatur
John H. Hartley, Atlanta
Theodore R. Hatfield, West Point
David N. Hendler, Marietta
Alan R. Hinman, Decatur
George B. Hubbard, Columbus
Louis J. Jacobs, Milledgeville
Joseph L. Jensen, Marietta
Fleming L. Jolley, Brunswick
Alan David Kirsh, Macon
Robert T. Klingbeil, Marietta
Dixon A. Lackey, Atlanta
Dean E. Lapinel, Dunwoody
Earl A. Loomis, Augusta
James B. Martin, Albany
Yvonne P. McAllister, Macon
Debroah A. McClain, Tucker
Dale L. McCord, Atlanta
John M. McCord, Rome
Keith Merrill, Savannah
James A. Miller, Savannah
William S. Millians, Atlanta
Charles C. Mitchell, Albany
Philip E. Morgan, Norcross
Michael R. Murphy, Atlanta
Bruce C. Newsom, Columbus
John S. Newton, Moultrie
Ih Koo Park, Ft. Oglethorpe
William J. Pendergrast, Atlanta
Thomas H. Philbrick, Savannah
Dent W. Purcell, Savannah
Morgan B. Raiford, Atlanta
Jack E. Raybourne, Macon
Robert A. Riesenberg, Decatur
Pierre A. Rioux, Atlanta
John E. Roberts, Austell
Charles M. Rowley, Macon
John W. Sanders, Albany
Paul J. Scheinberg, Atlanta
M. Paul Schwartz, Atlanta
Jayanti Kumar Sen, Augusta
Sandra B. Sexson, Atlanta
John A. Shallal, Savannah
Charles B. Shiver, Augusta
Stuart A. Smith, Rome
Corbett H. Turner, Atlanta
Roger A. Vega, Dunwoody
Luiz Weksler, Macon
Halford S. Whitaker, Stone Mountain
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PRECAUTIONS
Special Risk Patients: VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.
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Pediatric Use: Safety and effectiveness in children have not been established.
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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

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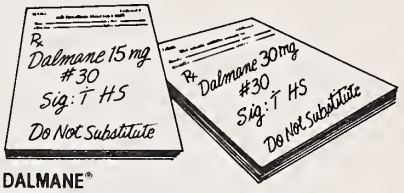
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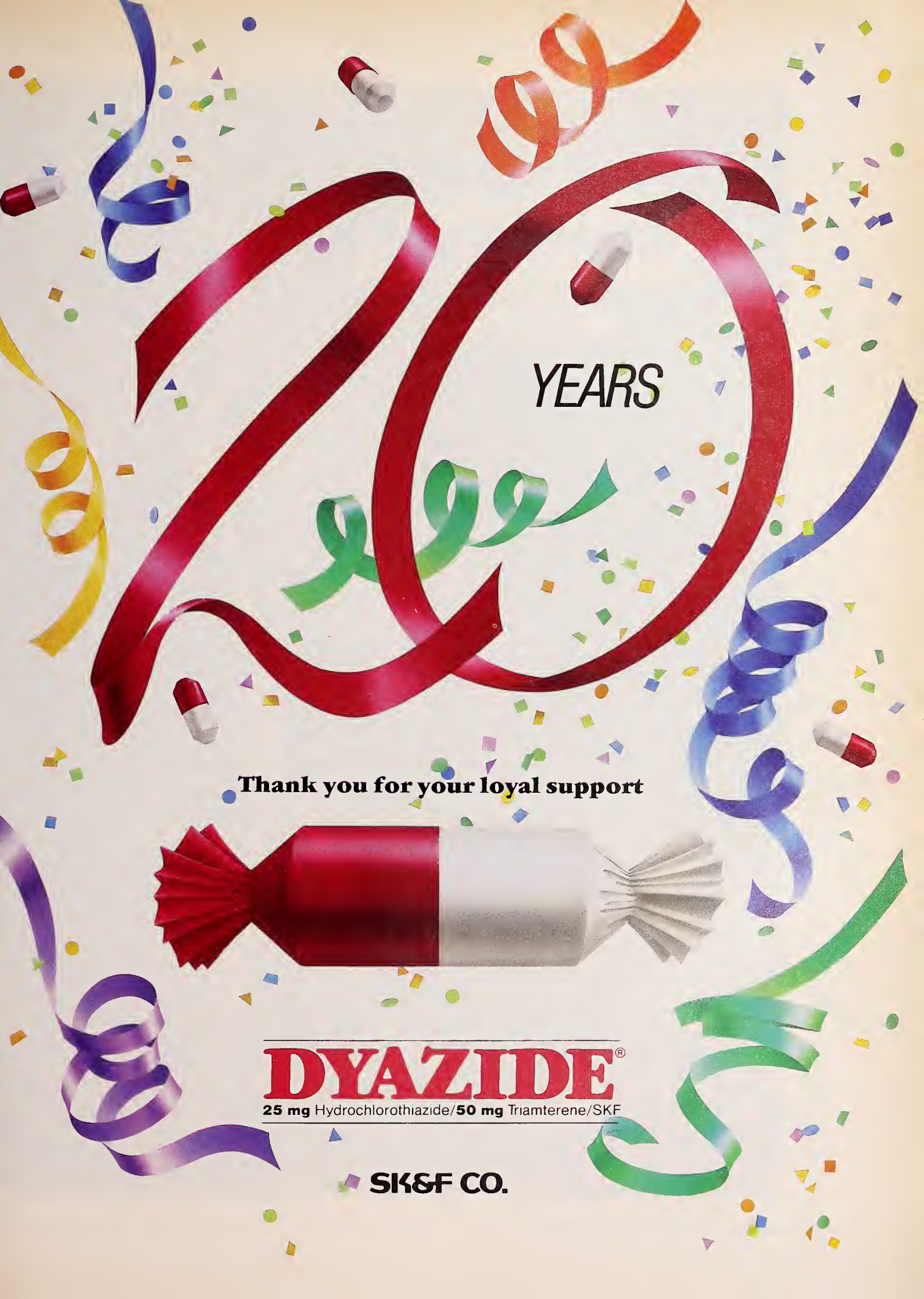
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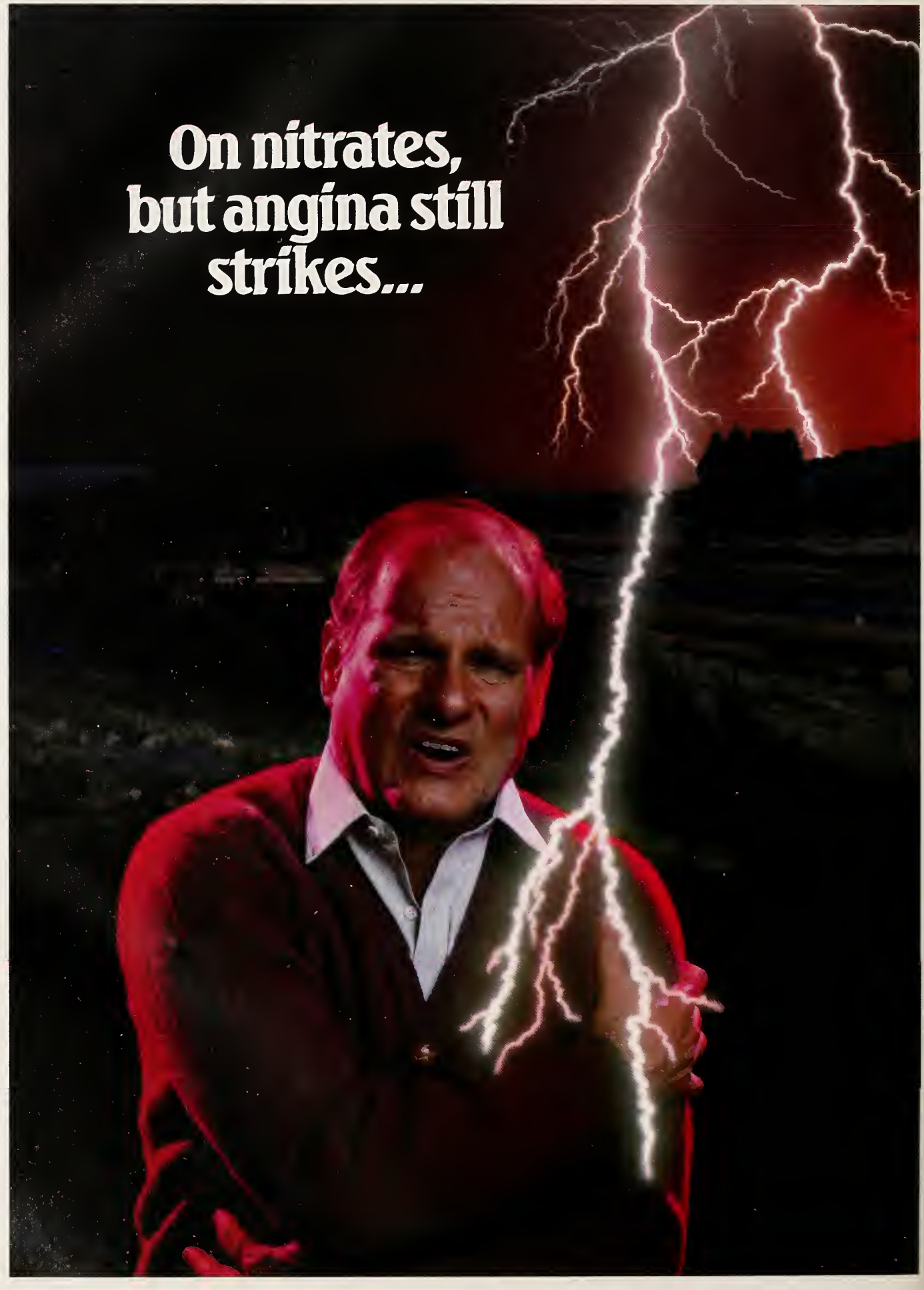
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Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. 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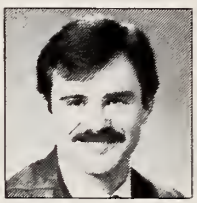
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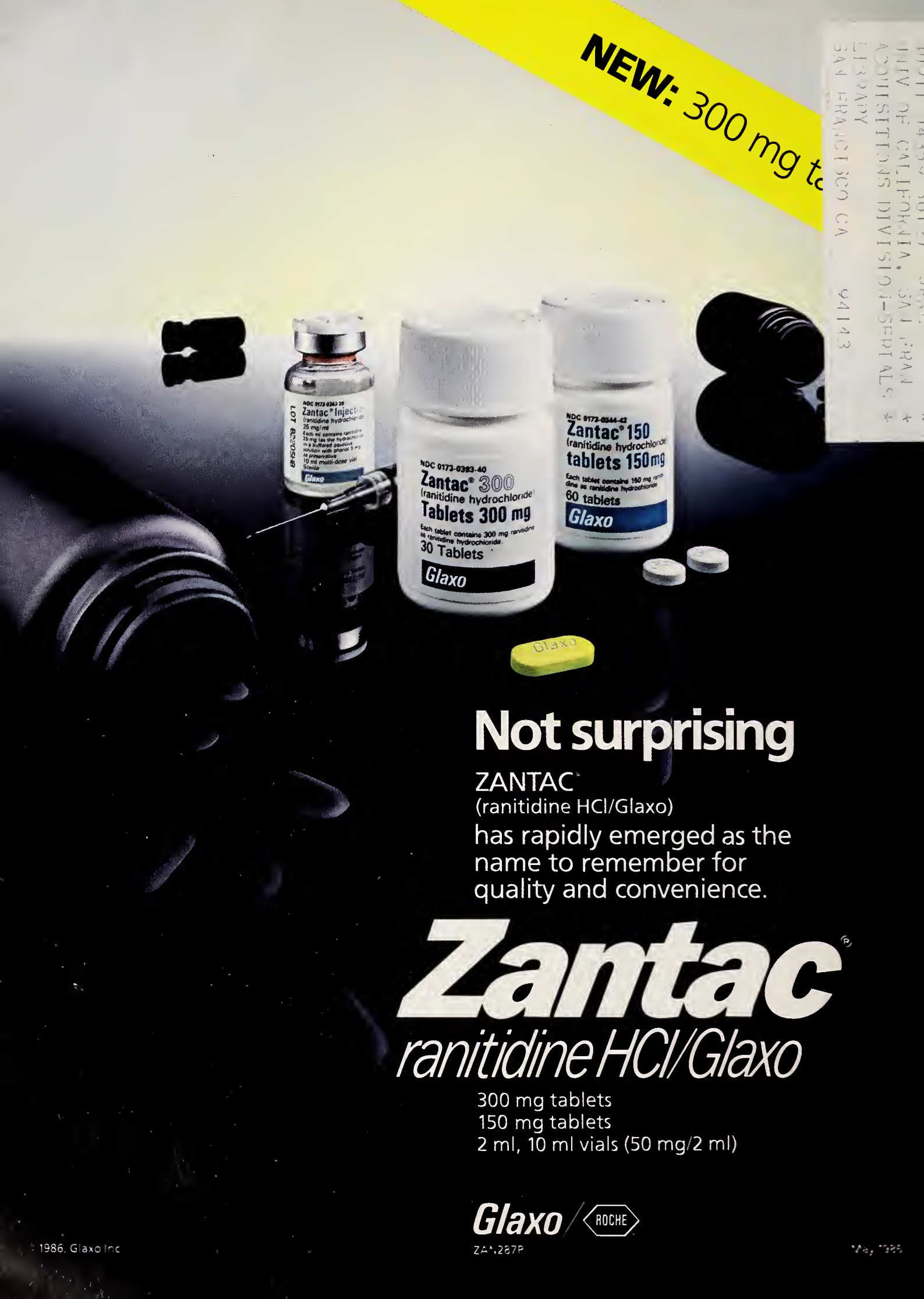
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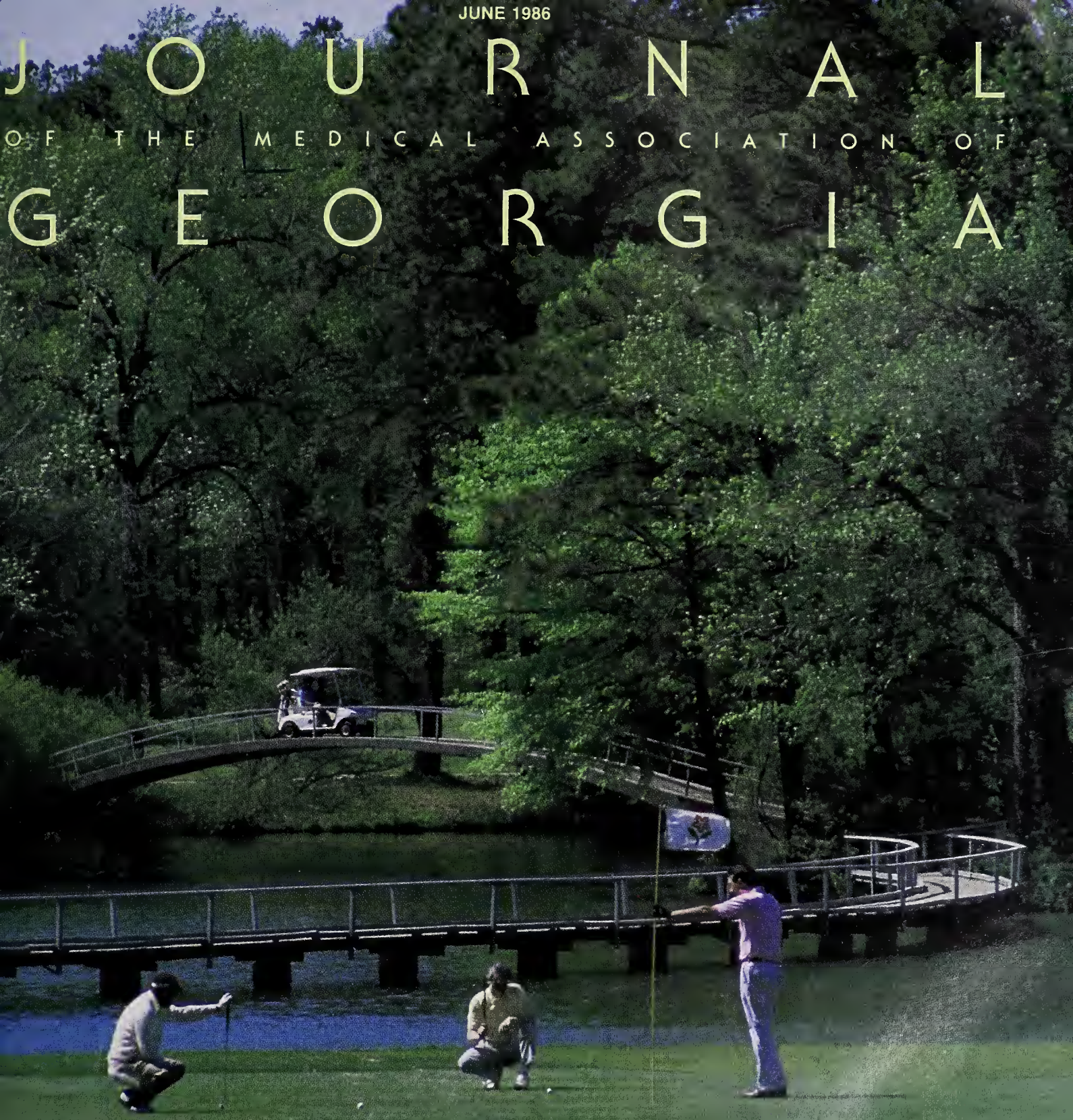
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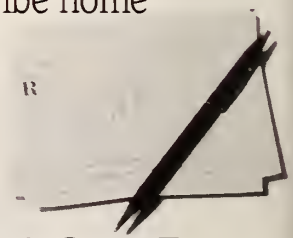
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CALENDAR

JUNE

13-15 — *Sea Island:* **Georgia Society of Dermatologists Annual Meeting.** Category 1 credit. Contact Gerald Chotiner, M.D., Secy.-Treas., 3250 Howell Mill Rd., NW, Ste. 201, Atlanta 30327. PH:404/352-1730.

16-20 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

20-22 — *Isle of Palms, SC:* **Medical Retina Workshop.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

JULY

10-12 — *Kiawah Island, SC:* **Clinical Obstetrics.** AMA Category 1 credit; ACOG cognates. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH: 404/828-3967.

10-21 — *Edinburgh and Turnberry, Scotland:* **1986 Radiology Update (preceding British Open Gold Championship).** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

12 — *Atlanta:* **Risk Management Seminar.** Category 1 credit. Contact James M. Moffett, Dir., Specialty Society Relations, MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

23-27 — *Kiawah Island, SC:* **9th Annual Critical Care Medicine.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

28-30 — *Kiawah Island, SC:* **9th Annual Pediatric Update: 1986.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

AUGUST

4-9 — *Hilton Head, SC:* **11th Annual Your Practice, Your Money, Your Family.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

11-15 — *Amelia Island,SC:* **1986 Summer Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

14-17 — *Hilton Head, SC:* **Georgia Psychiatric Association Interim Meeting.** Category 1 credit. Contact James M. Moffett, MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

18-22 — *Atlanta:* **A Comprehensive Board Review in Internal Medicine.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH: 404/727-5695.

22-24 — *St. Simons Island:* **MAG Legislative Seminar.** Contact MAG Legislative Div., 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

23-24 — *Sea Island:* **Georgia Society of Anesthesiologists: Cardiac Pitfalls in Clinical Anesthesia.** Category 1 credit. Contact William Hammonds, MD, Secy-Treas., Ga. Society of Anesth., 1364 Clifton Rd., NE, Atlanta 30322. PH:404/321-0111 x 3900.

28-31 — *Sea Island:* **Georgia Society of Otolaryngology/Head and Neck Surgery Annual Meeting.** Category 1 credit. Contact James M. Moffett, MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

29-30 — *Sea Island:* **Georgia Chapter, American College of Physicians Annual Meeting.** Category 1 credit. Contact Malcom Page, M.D., Governor, MCG, Augusta 30912. PH: 404/828-0211 x 4078.

SEPTEMBER

4-6 — *Atlanta:* **Introduction into Percutaneous Transluminal Angioplasty VI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

4-7 — *Kiawah Island, SC:* **Pulmonary Disease Review.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

7-11 — *Atlanta:* **Demonstrations in Percutaneous Transluminal Angioplasty XVI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

10-12 — *Atlanta:* **MKSAP VII American College of Physicians Review Course.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

14-16 — *Sea Island:* **Georgia Urological Association Annual Meeting.** Category 1 credit. Contact Jack M. Amie, M.D., Secy.-Treas., 2418 Parkwood Dr., Brunswick 31520. PH: 912/264-6362.

14-17 — *Sea Island:* **Georgia Obstetrical & Gynecological Society Annual Meeting.** Category 1 credit. Contact Chester C. Lane, Exec. Secy., 69 Butler St., SE, Atlanta 30303. PH:404/659-0289.

17-19 — *Savannah:* **10th Annual Neonatology — The Sick Newborn.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH: 404/828-3967.

18-20 — *Sea Island:* **Georgia Surgical Society Annual Meeting.** Category 1 credit. Contact William C. McGarity, M.D., Secy.-Treas., The Emory Clinic, 1365 Clifton Rd., NE, Atlanta 30322. PH:404/321-0111 x 3322.

22-27 — *Augusta:* **Obstetrics and Gynecology.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

25-27 — *Hilton Head Island:* **Frontiers in Nutrition.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

26-28 — *Augusta:* **Georgia Gastroenterologic Society Annual Meeting.** Category 1 credit. Contact David M. Taylor, M.D., Secy.-Treas., 960 Johnson Ferry Rd., NE, Ste. 345, Atlanta 30342. PH:404/252-9307.

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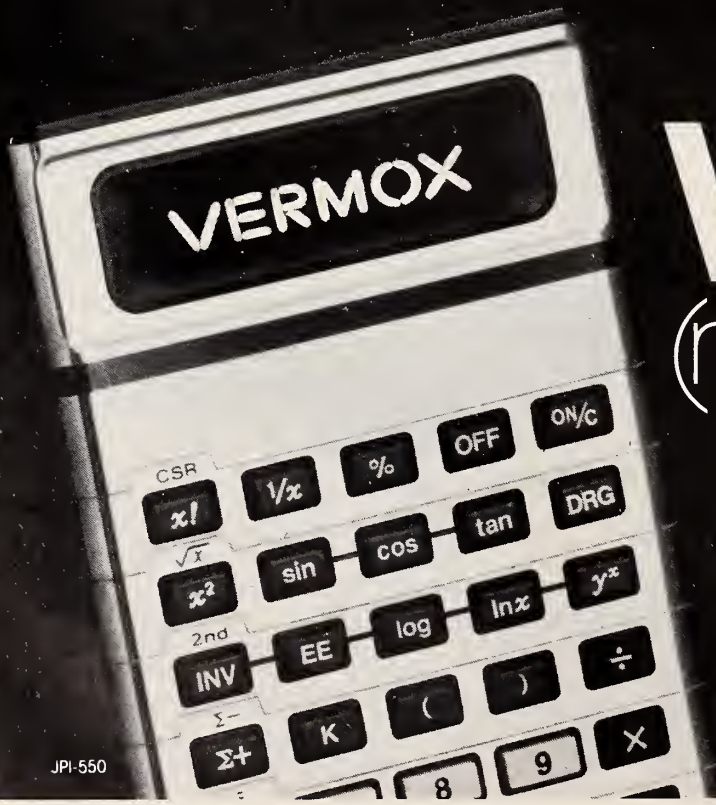
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But the optimum effect of this action will only be possible if the vast majority of us participate. This is not the time for freeloaders, not the time to "Let George do it." We get what we pay for, and there is no free lunch. Get involved today by sending your contribution to GaMPAC and insist that your colleagues do the same. They are not only hurting themselves but you as well by not participating. We can accomplish our goals, we must accomplish our goals. The load is much lighter when we all carry our share. The principal focus this year must be GaMPAC.

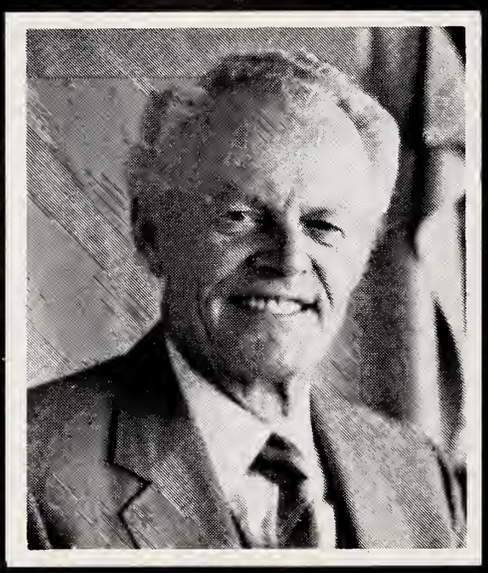
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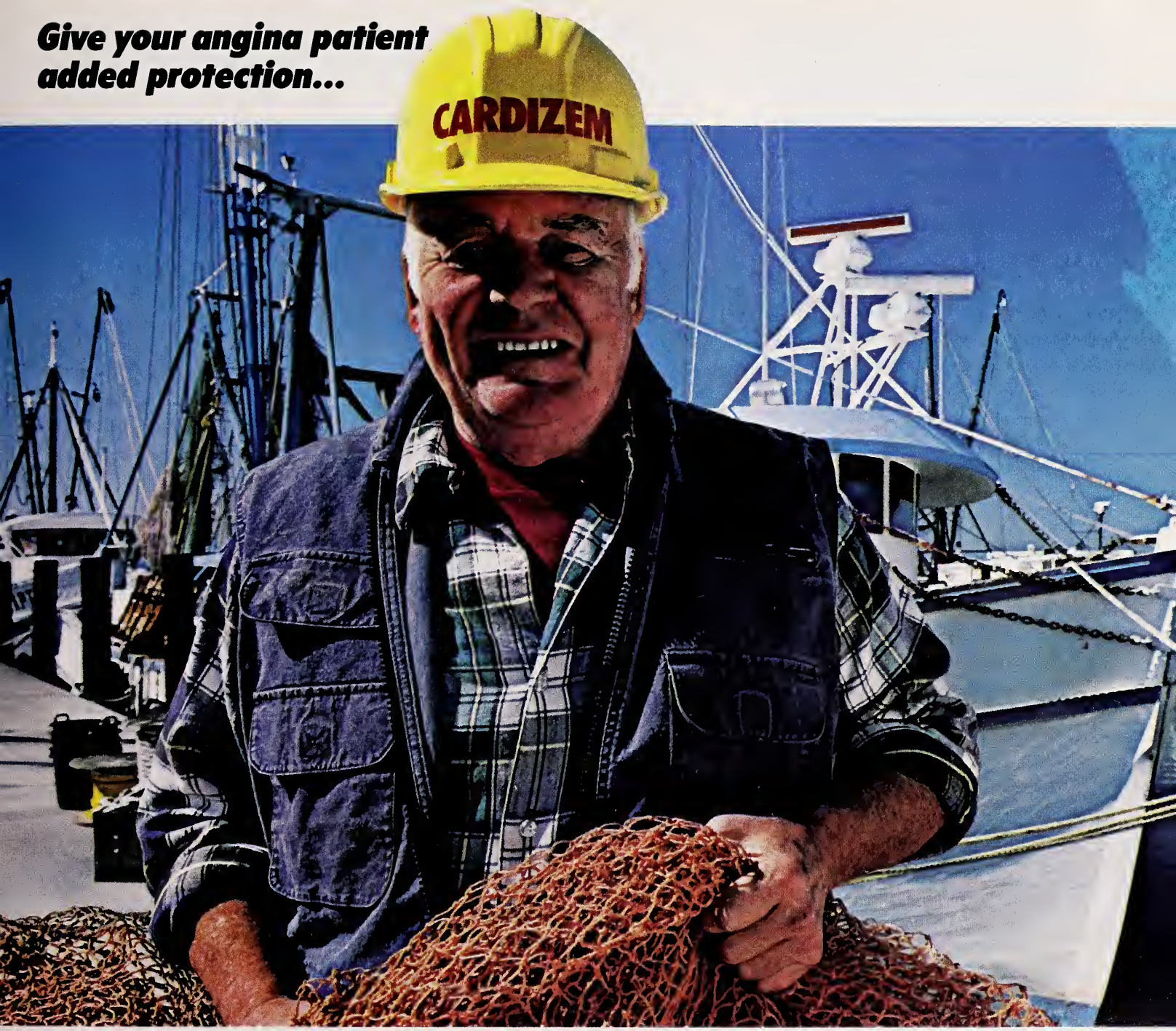
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INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System.	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGDT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Dther:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established

OVERDDSAGE DR EXAGGERATED RESPDNSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered.

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

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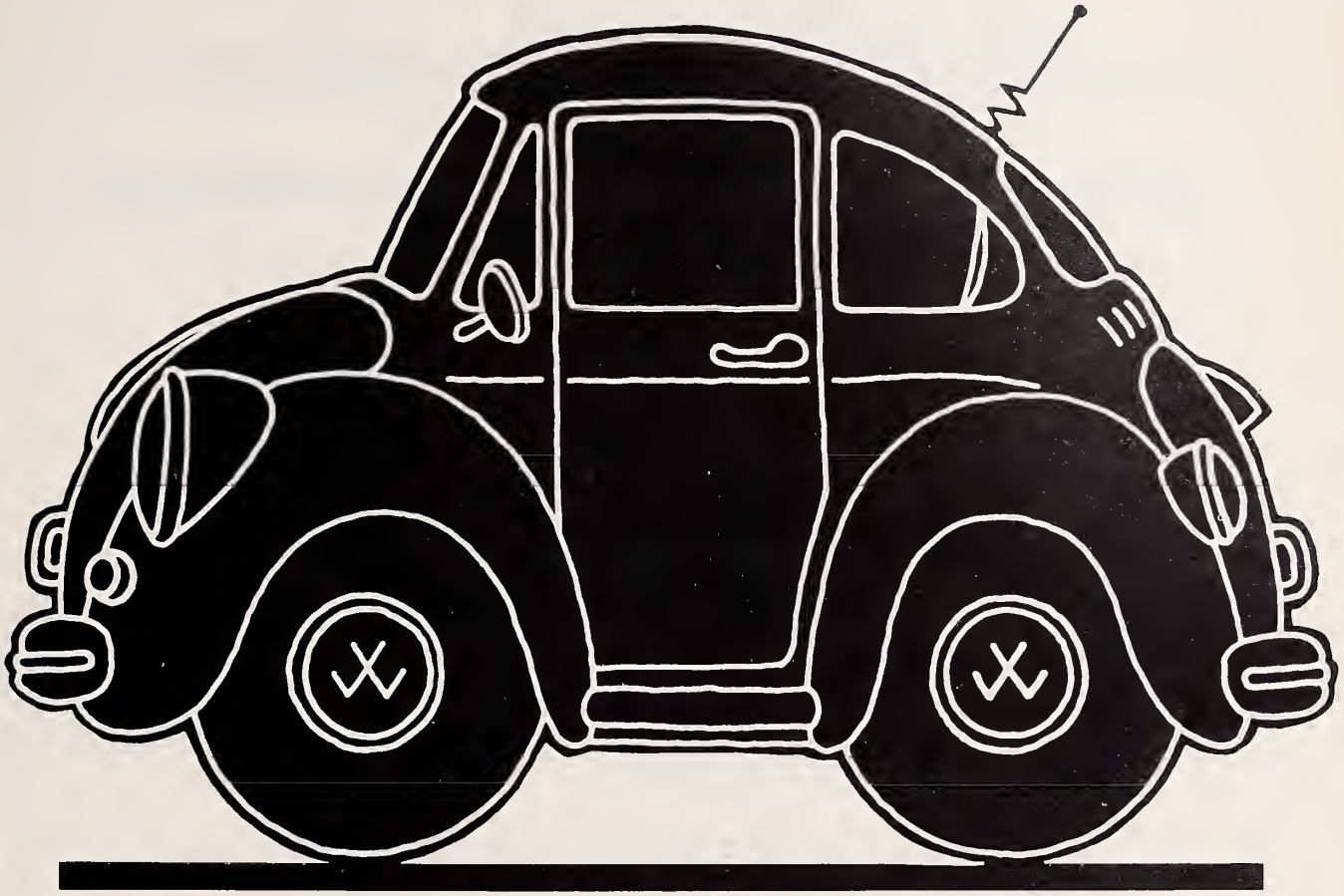
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The Speaker's Eye View of the 1986 Annual Session

"As we gathered at Callaway, there were many problems facing the delegates . . . Tort Reform . . . the Surcharge proposal by the St. Paul Insurance Company, the steady progress of our IPA-HMO. . . ."

THE Medical Association of Georgia completed its 132nd Annual Session at Callaway Gardens last April. I feel it was a successful session and have been asked to give a "Speaker's Eye View."

In previous editorials in Proceedings issues (June, 1984 and 1985), I have dwelt on the preparation for the Annual Session. It remains the same, and I will not repeat it except to reiterate the importance of preparation prior to the Session.

As we gathered at Callaway, there were many problems facing the delegates, notable among them the upcoming Tort Reform push in the 1987 State Legislature, the Surcharge proposal by the St. Paul Insurance Company, the steady progress of our IPA-HMO put into motion by the 1986 House, and other issues.

The St. Paul Surcharge proposal was such a late-breaking event that it would have not come before the House of Delegates unless the Board of Directors had drafted a Resolution so that the House could discuss it.

At the Thursday evening session of the House, nominations for MAG officers and AMA Delegates and Alternate Delegates were made. Since there were no contested seats, they were all elected at that session.

Friday morning, at 7:30, I met with the Vice-Speaker, the Vice-Speaker Elect, the Reference Committee Chairmen, Vice-Chairmen and MAG Staff to discuss the duties and functions of the Reference Committees, preparing the Chairmen and Vice-Chairmen for the hearings before their respective committees.

Following this, after the GaMPAC breakfast, the Reference Committee hearings began, except for Reference Committee G, which started after lunch.

As the hearings ended, the report writing started, a process that went on until well after midnight. The reports were then printed and made ready for distribution by 7:00 Saturday morning. They were picked up by the delegates and studied prior to the start of the second House Session.

Although the House Session started a bit slowly the proceedings went very smoothly, and the House was able to complete its business and adjourn about 2:30 P.M.

This was my 7th and final session as Speaker of the House, and I want to thank everyone who has been so helpful over the years, including the MAG Staff for their professional expertise, my Parliamentarians, Drs. Raines and Lanford, and our vice-speaker, Jim Kaufmann. Running a House of Delegates is truly a "team effort" and far beyond any one individual's ability to do it alone.

Finally, I want to state that I am very proud of our Association. The physicians of Georgia have decided to be a major force in the delivery of health care in Georgia. We have shown this by being innovative and forming such spin-off organizations as the Impaired Physicians Program, the Georgia Medical Care Foundation, MAG Mutual, and now our own IPA-HMO. If we wish to continue with this dynamic approach, we must also continue to be innovative and bold enough to successfully tackle the challenges before us. There is no doubt that we can do it. Our next challenge is Tort Reform, an idea whose time has come. In the ensuing months, we are going to marshall our forces and go before the State Legislature, confident of victory. This year's "hasty adjournment" proved to be only an attempt to postpone the inevitable.

Jack A. Menendez, M.D.
Speaker of the House

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MAG's 1986 House of Delegates was held at Callaway Gardens in Pine Mountain, Georgia.

Summary of the Proceedings of the Medical Association of Georgia's 132nd Annual Session

April 24-27, 1986, Pine Mountain

Call to Order

The First General Session of the 132nd Annual Session of the Medical Association of Georgia was called to order by the President, William D. Logan, Jr., M.D., of Atlanta, at 7:00 P.M. in the Peach and Willow Ballrooms, Callaway Convention Center, Callaway Gardens. Dr. Logan introduced the Reverend Sam Rogers, Pastor of the St. Paul United Methodist Church, Columbus, who delivered the invocation.

Dr. Logan introduced Dr. Cecil Whitaker who sang the National Anthem (accompanied by John D. Watson, Jr., M.D.) and led the audience in the Pledge of Alliance. Dr. Logan extended a warm welcome to all attending the meeting.

Memorial Service

The audience stood in respect as Dr. Logan read the names of those members who had died since the 1985 Annual Session. Included were: Charles R. Andrews, Canton; J. H. Arnold, Newnan; Malcolm Bazemore, Augusta; J. D. Blackburn, Ormond Beach, Fla.; Alonzo Boddie, Milledgeville; W. Charles Boswell,

Macon; William R. Burdison, Augusta; George Callaway, Jr., Decatur; Louis H. Cargill, Albany; Lee R. M. Conn, Columbus; George B. Dowling, Atlanta; Laurence B. Dunn, Bluffton, S.C.; David B. Fillingim, Savannah; Edgar J. Filson, Savannah; H. R. Frost, Swainsboro; William H. Galvin, Atlanta; Robert C. Garrett, Vienna; Wadley R. Glenn, Atlanta; Jose M. Gonzalez, Milledgeville; Andreas R. Gruentzig, Atlanta; W. D. Hall, Calhoun; H. Hilt Hammett, Jr., LaGrange; L. A. Hazouri, Columbus; A. G. Hendrick, Perry; Zach W. Jackson, Atlanta; Swami Kilari, Waycross; Zachry M. Kilpatrick, Augusta; Charles L. Langsam, Atlanta; James D. Lawrence, Macon; Jack M. Levin, Atlanta; Steve Lintymer, Columbus; James H. Litton, Tucker; Harold W. Long, Eastman; Mahmud Majonovic, Milledgeville; Miguel Marcucci, Austell; L. R. Massengale, Augusta; Henry Mayo-Rojas, Columbus; George A. McCrary, LaGrange; J. G. McDaniel, Atlanta; E. K. McLain, Augusta; Donald R. McRae, Jr., Augusta; E. K. Munn, Columbus; James L. Peters, Atlanta; John E. Porter, Savannah; Ralph Lee Robinson, Atlanta; Ruth T. Sanders, Augusta; W. Pat Smith, Stone Mountain; Robert J. Starling, Donaldsonville; Albert L. Stone, Forest Park; Margaret Thornton, Atlanta; J. W. Thurmond, North Augusta, S.C.; S. B. Traylor, Barnesville; Carlos R. Triana, Columbus; A. S. Trulock, Albany; George C. Vassey, Chattanooga, Tenn.; Frank Vinson, Fort Valley; Ralph C. Williams, New Mexico; M. H. Wylie, Augusta; and W. F. Zimmerman, Tifton.

Carson Burgstiner, M.D., Savannah, presented Mrs. Hilt Hammett with a special memorial to H. Hilt Hammett, Jr., M.D. and expressed sincerest admiration and gratitude for the life and service of Dr. Hammett — friend, colleague, and leader to us all.

Certificates of Appreciation

Certificates of Appreciation were presented to those members who have been active in Association affairs and have made special contributions to medicine and the Medical Association of Georgia.

Certificates were awarded to the following people:

William D. Logan, Jr., M.D.
MAG President (1985-1986)

Joseph P. Bailey, M.D.
MAG First Vice President (1985-1986)

William C. Collins, M.D.
Vice Chairman, MAG Board of Directors (1983-1986)

James A. Kaufmann, M.D.
Vice Speaker, MAG House of Delegates (1980-1986)

Jack F. Menendez, M.D.
Speaker, MAG House of Delegates (1980-1986)

Charles R. Underwood, M.D.
Second Vice President, MAG (1985-1986)

Mrs. Dent W. (Ann) Purcell
President, MAG Auxiliary (1985-1986)

Joe L. Nettles, M.D.
Chairman, MAG Board of Directors (1983-1986)

S. William Clark, Jr., M.D.
Chairman, MAG Ad Hoc Committee in the Implementation of the IPA/HMO (1985-1986)

Robert P. Cunningham, M.D.
Chairman, MAG Occupational Health Committee (1977-1985)

W. Daniel Jordan, M.D.
Chairman, MAG Committee on Medical Practice (1973-1985)

Charles W. McDowell, Jr., M.D.
Chairman, MAG Public Relations Committee (1979-1985)

John A. Harrel, Jr., M.D.
Chairman, MAG Committee on Continuing Medical Education (1984-1986)

John D. Watson, Jr., M.D.
Chairman, MAG Computer Advisory Committee (1983-1986)

Albert K. Schoenbucher, M.D.
Faithful Member, MAG Committee on Maternal and Infant Health (1968-1985)

Charles D. Hollis, Jr., M.D.
President, MAG Mutual

The Honorable Thomas B. Buck, III
Georgia State Representative Concerned With the Preservation of Quality Health Care

The Honorable Pete Robinson
Georgia State Representative Concerned With the Preservation of Quality Health Care

The Honorable Crawford J. Ware
Georgia State Representative Concerned With the Preservation of Quality Health Care

The Honorable Denmark Groover, Jr.
Georgia State Representative Concerned With the Preservation of Quality Health Care

The Honorable Pierre Howard
Georgia State Senator Concerned With the Preservation of Quality Health Care

The Honorable J. Tom Coleman, Jr.
Georgia State Senator Concerned With the Preservation of Quality Health Care

Fifty-Year Members

The following physicians were honored for having practiced medicine for 50 years or more: Max M. Blumberg, Atlanta; T. Sterling Claiborne, Atlanta; Isidore R. Cohen, Atlanta; Reese C. Coleman, Jr., Woodstock; W. W. Coppedge, East Point; Johnnie L. Gallemore, Perry; T. Schley Gatewood, Americus; Warren M. Gilbert, Rome; William N. Harper, Atlanta; J. Lamont Henry, Savannah; Byron Jay Hoffman, Atlanta; Charles E. Holloway, Atlanta; F. M. Houser, Macon; Charles K. Howard, Dunwoody; Louis R. Jelks, Reidsville; James T. King, Atlanta; Jack H. Levy, Augusta; A. Park McGinty, Atlanta; R. L. Neville, Savannah; Phillip H. Nippert, Atlanta; George E. Perkins, II, Rome; Joseph L. Rankin, Atlanta; Clarence N. Scheinbaum, Atlanta; Kirk Shepard, Thomasville; John W. Thompson, Walhalla, S.C.; James A. Woodall, Thomaston; and John G. Zirkle, Savannah.

Life Members

Dr. Logan announced that the following members had been awarded Life Membership in the Medical Association of Georgia: T. E. Bailey, Augusta; Joseph L. Berg, Albany; William R. Bottoms, Cumming; Curtis H. Carter, Augusta; R. E. Dallas,



This year's recipient of the Family Physician of the Year Award, Henry Wilder Smith, M.D.



Senator Pierre Howard, from DeKalb County, addressed the 1986 MAG House of Delegates.



The Auxiliary, represented by its president, Mrs. Ann Purcell, presented the Medical Association with a beautiful handmade quilt. Standing on the left is Dr. William Logan, Jr., President of the MAG, and on the right, Dr. Dent W. Purcell of Garden City.

Thomaston; Mark W. Fowler, Albany; F. N. Harrison, Augusta; John M. Hodges, Marietta; J. H. Kite, Jacksonville, Fla.; Lawrence Lee, Jr., Savannah; Louis O. J. Manganiello, Augusta; Milton Mazo, Savannah; Thomas A. McGoldrick, Jr., Savannah; C.W.C. Moore, Rome; Carl S. Pittman, Tifton; S. A. Roddenbery, Columbus; Peter L. Scardino, Savannah; Richard L. Schley, Jr., Savannah; M. M. Schneider, Savannah; Henry E. Steadman, Atlanta; Robert H. Stephenson, Atlanta; Jules Victor, Jr., Savannah; and R. K. Winston, Valdosta.

AMA-ERF Checks

Each year, the American Association-Education Research Foundation distributes funds collected in large part by the Auxiliary of the AMA and its various organizations. Mr. H. Dietz Carpenter, Jr., Chairman of the A-MAG AMA-ERF, and Mrs. Dent W. (Ann) Purcell, President of A-MAG, assisted Dr. Logan in the presentation of money raised in Georgia to our four medical schools, as follows:

Medical College of Georgia — $16,199.87

Emory University School of Medicine — $14,905.25

School of Medicine of Morehouse College — $5,893.04

Mercer University School of Medicine — $6,378.04

Report of the Auxiliary

Mrs. Dent W. (Ann) Purcell, President of A-MAG, introduced Mrs. William C. (Barbara) Tippens, Jr., current President-Elect of the A-MAG. In addition to the filed written report, Mrs. Purcell presented the activities and services provided by the Auxiliary this past year. She expressed the desire of the Auxiliary to the MAG to continue in a strong public relations role for the Association.

Introduction of Speaker

We have the great honor tonight of having, as our speaker, a Georgia Senator, who was one of the leaders of the fight for tort reform during the 1986 session of the Georgia General Assembly, The Honorable Pierre Howard. Senator Howard has served in the State Senate for 14 years and served as assistant floor leader for Governor George Busbee for 8 years. He is Chairman of the Senate Human Resources Committee and serves on the Judiciary, Rules, and Appropriation Committees. Senator Howard has been the author of such legislation as the Workfare Program, which requires able-bodied welfare recipients to work in public service jobs to earn benefits while receiving job training, and the Community Care Act which allows older Georgians to stay in their own homes instead of going to nursing homes. He has been practicing law in Decatur, since he graduated from the University of Georgia Law School in 1968.

Presentation of Awards

Caroline J. Williams, M.D., was awarded MAG's Distinguished Service Award, and A. Preston Russell, M.D., was the recipient of the Civic Endeavor Award. Henry Wilder Smith, M.D., was honored as the Family Physician of the Year.

Dr. Williams, an internist from Savannah, received the Distinguished Service Award for meritorious and distinguished service reflecting credit

and honor on the Association. She is in private practice and serves as the Medical Director for Hospice Savannah, Inc. She has been president of the TB Association and the Heart Association and has been an active member of the American Medical Association (AMA), the Medical Association of Georgia, the Georgia Medical Society, and the Georgia Thoracic Society.

Other honors Dr. Williams has received over the years include the Georgia Professional Achievement Award for Vocational Rehabilitation, the Sertoma Club Award for service to mankind, the AMA Physician's Recognition Award, and the Mother of the Year Award. According to her colleagues, Dr. Williams "has served with dignity, and has demonstrated integrity, dedication, and hard work and has been unsparing in her continuous efforts to bring comfort and healing to those under her care and to whom she inspires hope and courage by her unselfishness, cheerfulness and bright disposition."

Dr. Russell, a pathologist in Savannah, received MAG's Civic Endeavor Award for his outstanding public service and participation in civic activities. Professionally, he is a Fellow of the American Cancer Society, a diplomate of the National Board of Medical Examiners, and is a member of the American Medical Association, the Medical Association of Georgia, the Georgia Medical Society, and the Georgia Association of Pathologists.

In his community, Dr. Russell has served as curator of the Georgia Historical Society, chairman of Georgia's 250th Anniversary celebration, and co-chairman of the Mayor's Battle Park Commission.

Dr. Smith, a family physician from Swainsboro, received the Family Physician of the Year Award for being a leader in his profession, as well as his community. On January 7, 1986, Dr. Smith, who has been in practice in Swainsboro since 1946, delivered his 5,000th baby. Currently, he averages seeing 50-70 patients a day in his clinic, and he is the Medical Director of the Swainsboro Nursing Home. He is also a faculty member of the Medical College of Georgia.

In 1972, Dr. Smith was named a Fellow by the American Association of Family Practitioners. He was one of five doctors in the state appointed by the Medical Association of Georgia as liaison committee member to the State Human Resources Board. He is also a member of the Georgia Academy of Family Physicians and the Southern Railway Surgical Association. According to his colleagues who nominated him for the award, Dr. Smith is "beloved by his patients, respected by his colleagues, and admired by his subordinates."

Adjournment

Following several brief announcements, Dr. Logan adjourned the First General Session at 8:30 P.M.

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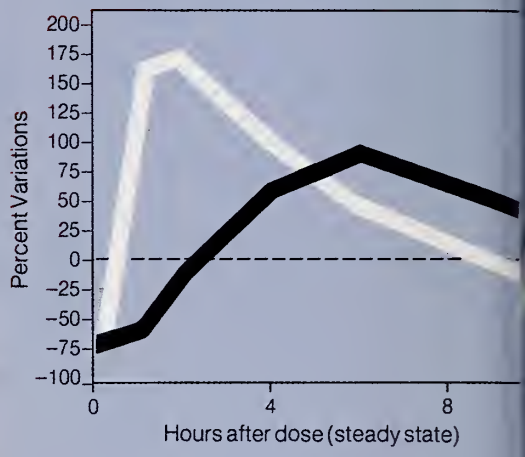
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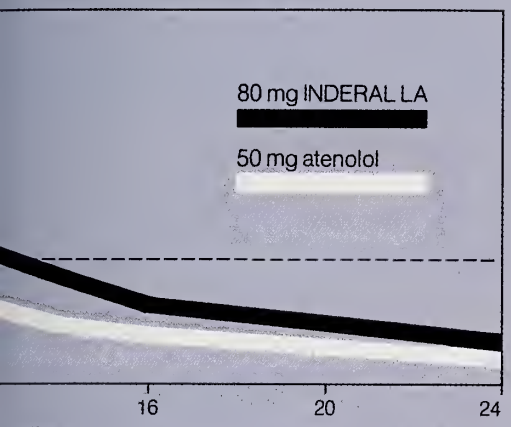
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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

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NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

REFERENCES

1. Data on file, Ayerst Laboratories. **2.** Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321-1323. **3.** Sumiye L, Vivian AS, Frisof KB, et al: Potassium loss associated with hydrochlorothiazide versus chlorthalidone. *Clin Ther* 1981;4:308-320. **4.** Ram CVS, Garrett BN, Kaplan NM: Moderate sodium restriction and various diuretics in the treatment of hypertension. *Arch Intern Med* 1981;141:1015-1019.

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First Session — House of Delegates

Thursday, April 24, 1986

The First Session of the MAG House of Delegates was called to order by the Speaker of the House, Jack F. Menendez, M.D., of Macon, at 8:35 P.M., Thursday, April 24, 1986, Peach & Willow Ballrooms, Callaway Convention Center, Pine Mountain, Georgia. James A. Kaufmann, M.D., Atlanta, served as Vice-Speaker of the House.

The Speaker called for a report from the Credentials Committee which was given by Milton I. Johnson, Jr., M.D. He reported that 125 delegates representing 30 component county medical societies in attendance and accordingly announced a quorum of the House was present.

Delegate Attendance

Edwin J. Galler, M.D., Karolyn J. Kramer, M.D., William M. Headley, M.D., L. E. Brown, M.D., Ronald A. Freeman, M.D., Kenneth C. Henderson, M.D., Emory W. Holloway, Jr., M.D., C. E. Johnson, Jr., M.D., Milton I. Johnson, Jr., M.D., Charles A. Lanford, M.D., Alva Louie Mayes, Jr., M.D., Jack F. Menendez, M.D., Minor C. Vernon, M.D., Alexander H. S. Weaver, M.D., Bruce S. Allen, M.D., Frank P. Bowyer, M.D., Douglas P. Dozier, M.D., Don R. Connell, M.D., Gary R. Loveless, M.D., Robert G. Bradbury, M.D., James P. Evans, M.D., Robert D. Gongaware, M.D., J. Moultrie Lee, M.D., J. Robert Logan, M.D., Joe L. Nettles, M.D., Dent W. Purcell, M.D., Roland S. Summers, M.D., Dan H. Willoughby, M.D., Clark L. Osteen, M.D., Zeb Burrell, Jr., M.D., Rupert H. Bramblett, M.D., Cecil L. Miller, M.D., William G. Cutts, Jr., M.D., E. V. Herrin, M.D., William C. Holmes, M.D., A. D. Muse, Jr., M.D., James L. Askew, M.D., Wells Riley, M.D., Milton B. Satcher, Jr., M.D., Richard A. Stappenbeck, M.D., Catherine S. Andrews, M.D., Donald H. Campbell, M.D., Richard W. Cohen, M.D., James S. Goodlet, M.D., William E. Holladay, Jr., M.D., Philip Z. Israel, M.D., Frank W. McKinnon, M.D., Rene A. Morell, M.D., Harry Porter, Jr., M.D., John E. Roberts, M.D., Ronald P. Roper, M.D., Gerald E. Sanders, M.D., Dan B. Stephens, M.D., Eugene H. Jackson, M.D., John S. Newton, M.D., H. Duane Blair, M.D., L. C. Buchanan, M.D., William R. Hardcastle, M.D., John P. Heard, M.D., Charles W. McDowell, Jr., M.D., LaMar S. McGinnis, Jr., M.D., Walker L. Ray, M.D., Ralph A. Tillman, M.D., Roy W. Vandiver, M.D., John Syribeys, M.D., Robert L. Davies, M.D., J. Dan Bateman, M.D., Chappell A. Collins, Jr., M.D., Ray L. McKinney, M.D., Michael H. Roberts, M.D., Joseph M. Jackson, M.D., James L. Ray, M.D., Sidney A. Bell, M.D., John I. Dickinson, M.D., Toby S. Morgan, M.D., Jim Lee Rogers, M.D., Joel D. Todino, M.D., Thomas J. Anderson, Jr., M.D., Harold Asher, M.D., Sam O. Atkins, M.D., James E. Averett, Jr., M.D., Julia E. Ballard, M.D., William H. Biggers, M.D., Spencer S. Brewer, Jr., M.D., Gwynne T. Brunt, Jr., M.D., William B. Burns, Jr., M.D., E. Napier Burson, Jr., M.D., Alvin H. Clair, M.D., Teresa E. Clark, M.D., Thomas A. Collentine, M.D., William C. Collins, M.D., David E. Dalrymple, M.D., R. Carter Davis, Jr., M.D., F. William Dowda, M.D., Richard E. DuBois, M.D., J. W. Estes, M.D., E. C. Evans, M.D., Louis H. Felder, M.D., Stephen R. Goldman, M.D., Harold A. Gussack, M.D., J. Harold Harrison, M.D., J. Rhodes Haverty, M.D., James A. Kaufmann, M.D., Bob G. Lanier, M.D.,

William D. Logan, Jr., M.D., Joe B. Massey, M.D., Arthur J. Merrill, Jr., M.D., William E. Mitchell, Jr., M.D., W. W. Moore, Jr., M.D., Hugo S. Moreno, M.D., Jeffrey T. Nugent, M.D., Garland D. Perdue, Jr., M.D., Walter J. Ratchford, M.D., J. K. Schellack, M.D., Rodrigo Cabezas, M.D., Dan Hankey, M.D., Ethan F. Staats, M.D., Louis W. Sullivan, M.D., David D. Tanner, M.D., Hugh S. Thompson, Jr., M.D., Charles E. Todd, Jr., M.D., L. Newton Turk, III, M.D., Emmerich Von Haam, Jr., M.D., Edward J. Waits, M.D., William C. Waters, III, M.D., Robert E. Wells, M.D., William H. Whaley, M.D., J. S. Wilson, M.D., John T. Yauger, M.D., Juanita Y. Lott, M.D., J. L. Rabb, M.D., Joseph G. Bussey, Jr., M.D., Lamar H. Waters, M.D., Robert H. Anderson, Jr., M.D., John W. Darden, M.D., William B. Jones, M.D., Ellis B. Keener, M.D., Louis G. Cacchioli, M.D., Virgle W. McEver, Jr., M.D., Daniel O. Fussell, M.D., G. V. Raghu, M.D., William C. Heard, M.D., Richard A. Wherry, M.D., James E. Collins, M.D., Larry Brightwell, M.D., Marvyn D. Cohen, M.D., Kenneth L. Goldman, M.D., Edmund M. Molnar, M.D., Bruce C. Newsom, M.D., Robert M. Patton, M.D., Jack A. Raines, M.D., James H. Sullivan, M.D., John D. Watson, Jr., M.D., William A. Wolff, M.D., Stephen Boyle, M.D., George L. Smith, M.D., Tyson D. Smith, Jr., M.D., James H. Tison, M.D., John G. Bates, M.D., Donald C. Abele, M.D., Joseph P. Bailey, M.D., William E. Barfield, Sr., M.D., Leon H. Bush, M.D., Albert A. Carr, M.D., Curtis H. Carter, M.D., A. Bleakley Chandler, M.D., Frederick C. Ferguson, M.D., Sumner Fishbein, M.D., Joseph W. Griffin, Jr., M.D., James L. O'Quinn, M.D., Edward H. Smith, Jr., M.D., Luther M. Thomas, Jr., M.D., William Weston, III,

M.D., Betty B. Wray, M.D., Henry A. Robinson, Jr., M.D., Daniel M. Feldman, M.D., Jesse L. Parrott, M.D., Joe C. Stubbs, M.D., Thomas H. Moseley, Jr., M.D., Henry A. Foster, M.D., James M. Skinner, M.D., Irving D. Hellenga, M.D., C. Peter Lampros, M.D., James C. Dudley, M.D., Gerald B. Muller, M.D., Sammie Dixon, M.D., Joseph M. Almand, Jr., M.D., M. Julian Duttera, Jr., M.D., J. R. Turner, M.D., Norman P. Gardner, M.D., Johnny T. Deen, M.D., James F. Beattie, Jr., M.D., Garland E. Kinard, M.D., S. William Clark, Jr., M.D., Alfred J. Davis, Jr., M.D., Floyd E. Davis, M.D., James C. Blackwell, M.D., John D. Richmond, M.D., David Wells, M.D., H. G. Davis, Jr., M.D., Steve Wilson, M.D., Fred A. Trest, M.D., S. Jones Miller, M.D.

Alternate Delegate Attendance

Dempsey S. Brown, M.D., John A. Hudson, M.D., G. A. Johnston, M.D., Thomas C. Jones, M.D., Carson B. Burgstiner, M.D., Elizabeth Hadley, M.D., S. T. Hartley, M.D., Charles R. Underwood, M.D., William L. Amos, Jr., M.D., Walton W. Curl, M.D., William C. Flanagan, Jr., M.D., William H. Mayes, M.D., Bob R. Maughon, M.D., Thomas A. Wade, Jr., M.D., Ronald B. Prince, M.D., John R. Molinaro, M.D., Ellis H. Nelson, M.D., Garnett J. Giesler, Jr., M.D., E. Capers Palmer, Jr., M.D., Joy Maxey, M.D.

Appointments of Committees

The Speaker announced the appointments of the House of Delegates committees as follows:

Reference Committee A: Richard E. DuBois — Chairman, Atlanta; C. Peter Lampros — Vice Chairman, Toccoa; O. Wytch Stubbs, Tucker; Toby S. Morgan, Rome; Joe S. Wilson, Atlanta; William A. Wolff, Columbus; Robert G. Bradbury, Savannah; James F. Beattie, Jr., Fort Oglethorpe; Alva Louie Mayes, Macon; and James S. Goodlet, Marietta.

Reference Committee B: William R. Hardcastle — Chairman, Decatur; William H. Whaley — Vice Chairman, Atlanta; Sidney A. Bell, Rome; William B. Jones, Gainesville; Carl V. Hancock, Jr., Albany; Gerald E. Sanders, Marietta; E. M. Molnar, Columbus; J. Robert Logan, Savannah; and Minor C. Vernon, Macon.

Reference Committee C: Dan B. Stephens — Chairman, Marietta; Teresa E. Clark — Vice Chairman, Atlanta; L. C. Buchanan, Decatur; Ronald P. Roper, Marietta; Jim Lee Rogers, Rome; James P. Evans, Savannah; Irving D. Hellenga, Toccoa; Robert M. Patton, Columbus; and Alvin H. Clair, Atlanta.

Reference Committee D: J. Moultrie Lee — Chairman, Savannah; L. E. Brown — Vice Chairman, Macon; LaMar S. McGinnis, Jr., Decatur; Harry Porter, Jr., Atlanta; Joel D. Todino, Rome; Chappell A. Collins, Jr., Albany; Bruce C. Newsom, Columbus; Bob G. Lanier, Atlanta; and Richard W. Cohen, Austell.

Reference Committee F: James H. Sullivan — Chairman, Columbus; H. Duane Blair — Vice Chairman, Decatur; C. Emory Johnson, Macon; Gwynne T. Brunt, Jr., Atlanta; William E. Holladay, Jr., Marietta; Frank F. Middleton, III, Albany; John I. Dickinson, Rome; and Dent W. Purcell, Savannah.

Reference Committee G: Charles A. Lanford — Chairman, Macon; Philip Z. Israel — Vice Chairman, Marietta; Roland S. Summers, Savannah; J. E. Roberts, Austell; Alexander H. S. Weaver, Macon; William W. Moore, Jr., Atlanta; James L. O'Quinn, Augusta; Charles W. McDowell, Jr., Decatur; H. Gordon Davis, Jr., Sylvester; and Wyman P. Sloan, III, Atlanta.

Credentials Committee: Milton I. Johnson, Jr. — Chairman, Macon; and Rene A. Morell, Smyrna.

Tellers Committee: Kenneth C. Henderson — Chairman, Macon; Donald H. Campbell, Marietta; Kenneth L. Goldman, Columbus; J. K. Schellack, Atlanta; and Hugo S. Moreno, East Point.

Parliamentarians: Jack A. Raines, Columbus; and Charles A. Lanford, Macon.

Adoption of Minutes

The Proceedings of the 1985 meeting of the MAG House of Delegates as published in the June, 1985, *Journal of the Medical Association of Georgia,* were approved.

Nominations

Speaker Menendez called on the House to proceed with nominations for the Officers, AMA Delegates, and AMA Alternate Delegates.

Election of Unopposed Candidates

It was agreed at the outset that unopposed candidates would be elected at this Session and the names of the candidates who have opposition would appear on the ballot for election, Saturday, April 26, 1987. Upon nominations duly made and seconded as indicated below, the following slate of unopposed officers were elected by acclamation:

President-Elect: Jack F. Menendez, M.D., Macon, was nominated for President-Elect by Charles Lanford, M.D., Macon, and seconded by Charles Hollis, Jr., M.D., Albany.

Second Vice-President: Joe L. Nettles, M.D., Savannah, was nominated for Second Vice President by J. Moultrie Lee, M.D., Savannah, and seconded by Carson Burgstiner, M.D., Savannah.

Speaker of the House of Delegates: James A. Kaufmann, M.D., Atlanta, was nominated for Speaker of the House of Delegates by Richard DuBois, M.D., Atlanta, and seconded by Jack F. Menendez, M.D., Macon.

Vice Speaker of the House: Jack A. Raines, M.D., Columbus, was nominated for Vice Speaker of the House by John D. Watson, Jr., M.D., Columbus, and seconded by Thomas J. Anderson, M.D., Atlanta.

Election of AMA Delegates and Alternate Delegates: Due to the addition of a new AMA Delegate and Alternate Delegate position this year, Dr. Menendez ask the consent of the House that any unexpired term of office be included in the election to the full term for the delegate and alternate delegate.

AMA Delegate: S. William Clark, Jr., M.D., Waycross, was nominated for the seat of AMA Delegate, previously held by the late H. Hilt Hammett, of LaGrange, by Floyd E. Davis, M.D., Waycross and seconded by Alfred L. Davis, Jr., M.D., Waycross.

AMA Delegate: Joe C. Stubbs, M.D., Valdosta, was nominated for the seat of AMA Delegate previously held by J. Dan Bateman, M.D., of Albany, by Jesse Parrott, Hahira, and seconded by Louis H. Felder, M.D., Atlanta.

AMA Delegate: Carson Burgstiner, M.D., Savannah, was nominated to succeed himself for a two-year term by J. Moultrie Lee, M.D., Savannah and seconded by Joe L. Nettles, M.D., Savannah.

AMA Delegate: F. William Dowda, M.D., Atlanta, was nominated for the new AMA Delegate seat by Richard DuBois, M.D., Atlanta, and seconded by James H. Sullivan, M.D., Columbus.

AMA Alternate Delegate: Beverly B. Sanders, Jr., M.D., Macon, was nominated for the position of AMA Alternate Delegate previously held by S. William Clark, Jr., of Waycross, by Cyler D. Garner, M.D., Gordon, and seconded by Joseph P. Bailey, M.D., Augusta.

AMA Alternate Delegate: Ellis B. Keener, M.D., Gainesville, was nominated for the position of AMA Alternate Delegate previously held by Joe C. Stubbs, M.D., of Valdosta, by John Darden, M.D., Gainesville, and seconded by Roy Vandiver, M.D., Decatur.

AMA Alternate Delegate: James H. Sullivan, M.D., Columbus, was nominated to succeed himself for a two-year term by C. Peter Lampros, M.D., Toccoa, and seconded by Cyler D. Garner, M.D., Gordon.

AMA Alternate Delegate: William D. Logan, Jr., M.D., Atlanta, was nominated for the new AMA Alternate Delegate seat by J. Rhodes Haverty, M.D., Atlanta, and seconded by J. Harold Harrison, M.D., Atlanta.

Judicial Council: Hugh F. Smisson, M.D., Macon, was nominated to succeed himself by William D. Logan, Jr., M.D., President of MAG, for a term to expire in 1991.



The Board of Directors met on Thursday, April 24. Standing is Dr. Bill Waters of Atlanta; Dr. William W. Moore, Jr., is in the foreground.

Directors and Alternate Directors

Speaker Menendez announced the results of the elections for Directors and Alternate Directors as conducted by the District Medical Societies and Component County Medical Societies:

First District:
Leon Curry, Metter — Director
Gary L. Loveless, Statesboro — Alternate Director

Sixth District:
Werner A. Linz, LaGrange — Director
Norman P. Gardner, Thomaston — Alternate Director

Seventh District:
Bannester L. Harbin, Rome — Director
Rudy M. Shirley, Dalton — Alternate Director

Bibb County Medical Society:
Charles A. Lanford, Macon — Director
Alva L. Mayes, Jr., Macon — Alternate Director

Dougherty County Medical Society:
Frank F. Middleton, III, Albany — Director
Carl V. Hancock, Jr., Albany — Alternate Director



The new 1986-87 President of the Auxiliary to the MAG after her installation, Mrs. William (Barbara) Tippins, of Dunwoody.

Hall County Medical Society:
John H. Reed, Gainesville — Director
James H. Leigh, Jr., Gainesville — Alternate Director

Medical Association of Atlanta:
William C. Collins, Atlanta — Director
Bob G. Lanier, Atlanta — Alternate Director

Georgia Medical Society:
Joe L. Nettles, Savannah — Director
Roland S. Summers, Savannah — Alternate Director

Muscogee County Medical Society:
E. M. (''Mac'') Molnar, Columbus — Director
Ken L. Goldman, Columbus — Alternate Director

Officers' Reports

President — Not referred
President-Elect — Not referred
Immediate Past President — Ref. Com. A
Second Vice President — Not referred
Chairman of the Board — Not referred
Secretary — Not referred.
Treasurer — Ref. Com. F

Reports of Directors

All of the following Director's Reports were not referred to a Reference Committee:

First District Society
Second District Society
Third District Society
DeKalb Medical Society
Medical Association of Atlanta
Sixth District Society
Seventh District Society
Eighth District Society
Ninth District Society
Tenth District Society
Bibb County Medical Society
Clayton-Fayette County Medical Society
Cobb County Medical Society
Crawford W. Long Medical Society
Dougherty County Medical Society
Floyd-Polk-Chattooga County Medical Society
Georgia Medical Society
Hall County Medical Society
Muscogee County Medical Society
Richmond County Medical Society

Committee Reports

Access to Health Care — Ref. Com. B & F
Auxiliary — Not referred
Building & Land — Not referred
Cancer — Ref. Com. D
Computers in medicine — Not referred
Constitution & Bylaws — Ref. Com. B
Continuing Medical Education — Not referred
Cost Awareness — Not referred
Emergency Medical Services — Not referred
Health Education — Not referred
Impaired Physicians — Not referred
Legislation — Ref. Com. C
Maternal & Infant Health — Not referred
Medical Aspects of Sports — Not referred
Medical Practice — Ref. Com. B
Medical Schools — Not referred
Medicine & Human Values — Ref. Com. B
Membership — Not referred
Membership Insurance — Not referred
Non-Physician Health Care Providers — Not referred
Occupational Health — Not referred
Physician-Lawyer Liaison — Not referred
Prison Health — Not referred
Public Health — Ref. Com. A
Public Relations — Ref. Com. G
Fiscal Note — Ref. Com. F
Scientific Assembly — Not referred
Specialty Society Relations — Not referred
Third Party Payors — Not referred
Trustees Advisory — Not referred
Ad Hoc Committee on Diversion of Legitimate Prescription Drugs — Not referred
Liaison on Georgia Osteopathic Medical Association — Not referred
Ad Hoc Committee on the Implementation of the IPA/HMO — Not referred
Ad Hoc Committee on Medicaid payment to Public Health Clinics — Not referred
Ad Hoc Committee on Medical Liability — Ref. Com. G
Ad Hoc Committee on Radiology Technologists — Not referred
Ad Hoc Committee on Tort Reform Planning — Ref. Com. G

Departments

Journal of the Medical Association of Georgia — Not Referred

Special Reports

Greater Atlanta Health Care Coalition — Not referred
Judicial Council — Not referred
AMA Delegation — Not referred
Auxiliary — Not referred
GaMPAC — Ref. Com. C
MAG Mutual Insurance Company — Not referred
MAG Resident Physician Section — Not referred
MAG Medical Student Section — Not referred
Georgia Medical Care Foundation — Not referred

New Business — Resolutions

The Speaker proceeded to new business by calling for the introduction of Resolutions (Res.) which were assigned to Reference Committees as follows:

Res. 1: Admission of D.O.s to MAG — B
Res. 2: Cobb County Medical Society Adolescent Urine Drug Screening Program — D
Res. 3: Tort Reform and Balanced National Budget — C
Res. 4: Medicare Hospitalization Appeals Procedures — B
Res. 5: Standards for Third Party Reviewers of Physician Claims — B
Res. 6: Preadmission Certification — B
Res. 7: Memorial to H. Hilt Hammett, Jr., M.D. — D
Res. 8: Auxiliary Commendation — A
Res. 9: Georgia Medical Care Foundation — A
Res. 10: Use of Steroids by High School Athletes — D
Res. 11: Seat Belt Legislation — C
Res. 12: Liability Insurance Crisis — A
Res. 13: Commendation of MAG Professional Liability Insurance Committee — A

Res. 14: MAG Membership — A
Res. 15: Insurance Programs Endorsed by MAG — A
Res. 16: Liability Insurance Premiums — A
Res. 17: Liability Insurance Crisis — D
Res. 18: Seat Belt Legislation — C
Res. 19: Donor Insemination — C
Res. 20: Office Laboratory Quality Control — A
Res. 21: Tort Reform Legislation — C
Res. 22: Tort Reform Legislation
(RESOLVE 1) — C
(RESOLVE 2) — F
(RESOLVE 3) — B
Res. 23: IPA/HMO — A
Res. 24: Attorney General's Ruling on Delegation of Duties — C
Res. 25: Medical Peer Review — A
Res. 26: IPA/HMO — A
Res. 27: Commendation of Harrison L. Rogers, Jr., M.D. — D
Res. 28: Diversion of Legitimate Schedule II Narcotic Drugs — C
Res. 29: Appealing Denial of Hospital Stay — A
Res. 30: National Tort Reform Legislation — C
Res. 31: Verification of Credentials — D
Res. 32: State Automobile Safety Inspection — C
Res. 33: Economics of Medicine — D
Res. 34: Resident Membership in MAG — A
Bd. Res. 1: Surcharge Proposal by St. Paul — C

UNREFERRED REPORTS

The reports which did not have any recommendations were not referred to any Reference Committee. All such unreferred reports were filed for information. They are as follows:

President

William D. Logan, Jr., M.D.

First of all I should like to take this opportunity to thank each of you for your tolerance and support during the past year. It has been a fantastic time in the history of the Medical Association of Georgia and I feel privileged to have participated in it. There will be other reports covering various aspects of our society, but I should like to mention some of the main ones with some of my recommendations for the future.

The IPA/HMO that the House of Delegates directed us to implement last year has come to fruition. Along with the tremendous effort of staff and other directly involved members, we were able to meet and actually exceed all goals that were set. The first effort was to enlist 2,000 doctors by October; we were able to list approximately 2,600. The next step was to issue some stock. This was done and funds for capital backing were added. It was then our major goal to receive our license for a statewide HMO by January and this was also accomplished. As you probably know, we are the only statewide licensed HMO at the present time and, the legal boards have been established for the business corporations known as the Georgia Health Network. Marketing is now underway.

Many aspects of the IPA/HMO have been discussed and there are those who still feel that this was an unwise course of action. Let me first say that I defend each of us in our right to disagree because I firmly believe this makes for a stronger organization. However, I believe it must be reiterated that the concept many have had in supporting this action was that it gives us a legal corporation with which we could negotiate; that it would allow us the most influence in the market place of the rapidly developing alternative delivery systems. This is very important to understand because so many feel that this is only establishing another business. As I see it, just being another business is very far from being the actual reason and need for this organization. I can share with you that even a short year ago major companies and other businesses that were involved in the alternative delivery systems paid little or no attention to MAG. We had essentially no influence whatsoever in this area. However, at this time, it has become very apparent that other businesses are now aware of MAG and are seeking consultations with the new IPA/HMO system that has been established. This has been a very gratifying move to me as I firmly believe this to be the primary purpose for our banding together. I hope that in the ensuing months many others in our organization will join us and be counted. This will make our presence even stronger.

Tort reform has occupied a great deal of our thoughts, efforts, and consternation during the past year. We were all rather stunned and in a state of shock when the General Assembly simply put down their hands and went home without significant action. One major accomplishment is that we were able to forge a stronger thrust toward this reform in our own ranks and additionally participate in the development of the liability crisis coalition which will ultimately be our major strength. It was gratifying to see and feel and sense the interest of doctors throughout the state. There seems to be more unanimity of purpose toward this goal than any other point which has been addressed for several years. I believe that we have made some definite steps forward. We need only to persist and continue with the good work in order to enable us to see some real changes. There have been many who have felt that we should have been more visible with tv or radio exposure, but it was the general opinion of our strategic advisors, that this would not give us much gain. Therefore, I refrained from responding to several of these invitations.

After long discussions at the Executive Committee I was recently directed to appoint a committee to set the general strategy and work projection for next year and bring this to the House of Delegates for discussion and action. This has been done and that report will be presented to you at this meeting.

Along with these various programs we noted a great increase in our membership. This will be more specifically covered in the Secretary's Report. It should be noted that we gained enough members to get another delegate and alternate delegate to the



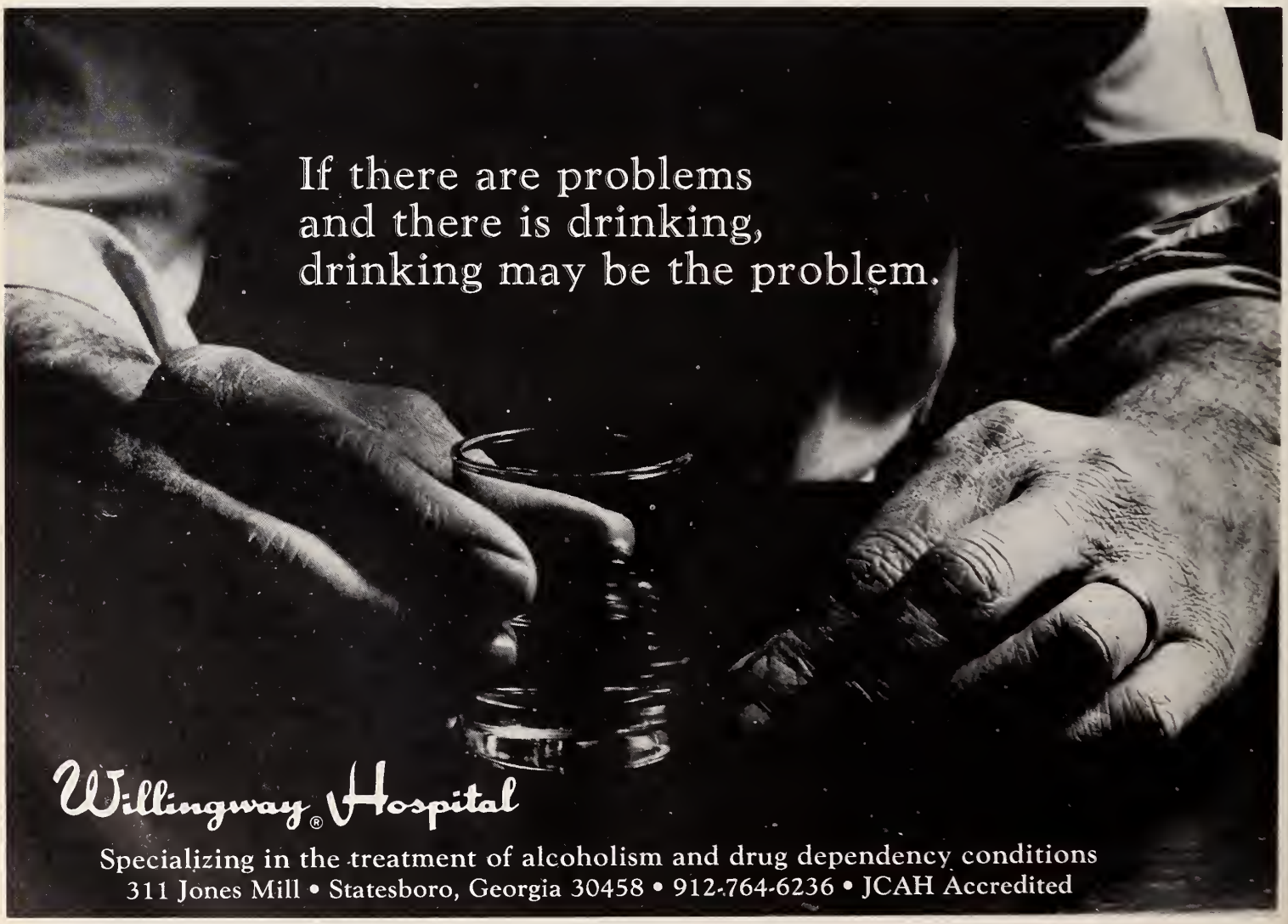
John D. Watson, Jr., M.D., 1986-87 President of the MAG.

AMA. Without question, the increased memberships and dues have made our financial position much stronger. Therefore, there's no need to consider a dues increase at this time.

We held meetings with our Education Committees highlighted by a liaison committee meeting with all four medical schools represented. It was my feeling that we all came away from that meeting feeling closer than we have in the past. All four medical schools' faculties are now totally enrolled in the Georgia Health Network system. They are, therefore, members of MAG. This was also a very satisfying accomplishment. I believe that we can continue a strong relationship with education in the medical schools and in post graduate training, allowing more effectiveness in these areas. A continued, vigorous, and working relationship in this area is certainly recommended.

There has been considerable disagreement over the past few years regarding the State Cancer Data Network. We have questioned this relationship and service and have made recommendations to the Cancer Committee as to our future needs. It is hoped that this will continue to some very meaningful end.

It is my feeling that our Public Relations Committee and its working staff needs to be singled out as having done a fantastic job this year. Under the able an energetic leadership of Dr. Jeff Nugent, with the help of Sherry Waronker, we have seen many innovations which I think have given



us great service from this committee. Their work and coordination with the tort reform has been very great indeed. We need very much to continue supporting this effort.

Let me take this opportunity to express my admiration and appreciation to Mrs. Ann Purcell and all the MAG Auxiliary. These spouses have been extremely busy during this year with a great many projects. One, of course, was the tremendous support we received from them in the tort reform project. There is no doubt that we have no better supporters than this group. They have been with us through thick and thin and I believe will remain with us with concerted efforts.

It has also been a great delight to bask in the glory of one of our own, Dr. Harrison Rogers, who is President of the AMA this year. This has given us great exposure on the national level and has been of tremendous benefit to our area. I know I am speaking for all when I congratulate Dr. Rogers for his fine service and thank him for what he has meant to MAG.

One cannot remember happiness without sharing the sadness of the loss of Hilt Hammett. He was one of our great stalwarts.

There are several areas which need continuing efforts and ideas for future betterment of our state. I should like to mention some of these. The Georgia Medical Care Foundation (GMCF) has continued to function, in spite of some apparent difficulties in meeting all the requirements of HCFA. Although this organization is primarily utilizing physicians in leadership roles, it has become somewhat more separate than perhaps desired. This has been discussed between MAG and the GMCF leadership on several levels. I feel that the stage has been set for future negotiations to be able to work this into a better climate. I believe this to be of utmost importance to work toward in the coming year.

There are numerous membership services that can and should be offered to our membership. Past efforts toward presenting these services have not been very satisfactory. I believe that with some concentration and effort, these services could be of significance. The whole realm of work with computers could be brought to our offices through a single service. Other services need to be presented in a better way in order for us to fully understand and take advantage of them.

Another area that I feel should be greatly strengthened and improved is that of the health programs in our elementary and high schools. The Auxiliary has worked with the DHR on a project this year, done in cooperation with MAG, for some health education in our high schools. I think this is a good start and much effort has been exerted by the Auxiliary toward this. We look forward to seeing some of the results. I am thinking of additional programs with sports medicine that could be better coordinated through MAG.

These are only a few of the major items which have been addressed this year by the leadership of MAG. As you see, all of these problems were not solved. I do hope that continued effort has been present in order to stimulate continued progress. Again, let me say, thank you to all of the Executive Committee, the Board, Committee Chairmen, staff, and members who have been so supportive during this time. It makes me realize what a great organization we have.

President-Elect

John D. Watson, Jr., M.D.

A year of transition, expansion, education, renewal of involvement, dedication, teamwork, and individual effort. This has been a banner year. The flame of medicine in Georgia has been rekindled and excited the nation. We have been able to bring forth a renewed vigor and hope for our future and the future of those who follow us in health care.

We have seen new leadership emerge, existing leadership mature, and most exciting is the reversal of "Doomsday" philosophy. We now feel that we can be the major force in medical care and service and not relegated to someone's hireling. But, we have only begun!!!

Under the leadership of our President and Immediate Past President we have begun to accomplish what was thought impossible. Now it will be our ongoing task to consolidate, expand, and truly unite the physicians of Georgia into the dynamic force they are, to unleash the many talents and abilities, to establish the best system of health care possible. I have no doubt we can do this.

With understanding, with forebearance, and with participation — yes, total participation, we cannot fail. We dare not fail. It has indeed been a banner year.

Second Vice President

Charles R. Underwood, M.D.

Your Second Vice-President has spent the past year attempting to attend all sessions of the Executive Committee and the Board of Directors in an effort to maintain a state of current knowledge concerning the posture of the Medical Association of Georgia. This has provided an even more thorough and knowledgable understanding of our activities than my participation through past years has provided. From this involvement, I would make several observations.

In the first place, the degree of activity and participation by members of the M.A.G. in our widespread activities is a matter of great comfort. There is no dearth of capable and interested members with which to carry out our task. This pool of talent is impressive. Beyond the state level, national leadership positions are generously occupied by members of the M.A.G., as one recalls such prestigious representation as the President of the A.M.A. (Jack Rogers); the President-Elect of the American College of Surgeons (Dean Warren); the

Vice-Chairman of the Board of Regents of the American College of Surgeons (Josh Jurkewicz); President of the American Academy of Pediatrics (Martin Smith); President of the American College of Allergists (John G. Leonardy); President of the American College of Nuclear Medicine (John D. Watson, Jr.); President of the American College of OB/GYN (Luella Klein); President of the American Society for Gastrointestinal Endoscopy (Francis Tedesco); President of the American Society of Plastic and Reconstructive Surgeons (William Huger) and others too numerous to mention.

Secondly, when a major effort must be mounted — and this year such was represented by our involvement with tort reform in the state and continued development of the HMO-IPA, our organizational and management structure is stressed. Under the impressive and capable management of Mike Fowler we must continue to devote careful attention to the continued expansion and improvement of our professional management team. Unwise frugality in this area of our organization's function will only lead to regrettable failure and inability to function in the years ahead.

Thirdly, our fiscal stability must be ever more carefully guarded as it has been this past year through highly capable financial management. In an effort to keep dues as low as possible and expenditures as reasonable as possible, we have on occasion treaded dangerously close to a financial posture less desirable than one might wish. We must look toward the development in future years of a fiscal policy that will provide more comfort should an unexpected crisis arise and this taking perhaps the form of the development of a reserve pool of monies.

And finally, the M.A.G. is a constantly evolving organism — not a static, deteriorating one. With this in mind, we must be ever watchful for and encouraging to those energetic and interested young physicians who must replace those of us long in the service of the organization and upon whom the future of our profession must rest.

Chairman of the Board

Joe L. Nettles, M.D.

In our last four meetings the Board has continued to meet its responsibilities in three very important ways: 1) helping to direct the activities of our Association; 2) maintaining a vigilant guard on the MAG Budget; and 3) responding, as we always try to do, to the needs of our membership.

During the past year we have discussed at length MAG's two biggest recent initiatives, tort reform and our own HMO-IPA. We also continue to serve as MAG's principal "soundingboard" for our sister organizations, MAG Mutual and the Georgia Medical Care Foundation, both of which make regular reports at our meetings.

Last year in my annual report I gave my pledge that the Board would continue to monitor MAG's fiscal affairs in order to help strengthen our Association's financial position. We have done so. In the last twelve months, the Board has looked carefully at MAG's outlays to the Impaired Physicians Program; and to generate more revenue we have raised registration fees for the MAG Scientific Assembly, our big continuing medical education meeting in November.

The Board has devoted much of its time and concern to the needs of our membership. In our last four meetings we have heard reports, and recommended action, concerning the following:

—procedures used by the Composite State Board of Medical Examiners to revoke physicians' licenses;
—HCFA policies relating to reimbursement of physicians for the interpretation of laboratory results;
—questions arising from the desire of physicians in Camden County to form their own medical society;
—concern over contractual arrangements between DHR and the Department of Medical Assistance allowing Medicaid payments to public health clinics;
—reimbursement by third party carriers for surgery performed in a physician's private office;
—legislative action to ensure appropriate regulation of radiology technologists;
—the diversion of legitimate prescription drugs and the problem of substance abuse.

In dealing with these concerns the Board has listened carefully and exercised sound judgement.

Finally, I wish to mention a concern of my own. As the need arises, the Medical Association of Georgia has conceived, nurtured and developed ancillary organizations to meet the needs of the changing medical climate. Some of these organizations are the Georgia Medical Care Foundation, the Impaired Physicians Program, MAG Mutual Insurance Company, and the Georgia Health Network, which is the title of the HMO-IPA set up by the Medical Association of Georgia.

As these organizations mature, for better or worse, they leave home, seeking to continue to carry on their duties, but not under direct MAG control.

Unfortunately, the traditional harmonious relationship between the Medical Association of Georgia and Georgia Medical Care Foundation is steering through troubled waters. In order to obtain the PSRO contract, Georgia Medical Care Foundation had to formally divest itself from MAG control. Last year's House of Delegates directed the MAG's computer be upgraded to carry out the Foundation's computer requirements for the more ambitious PRO program, and the Foundation contracted with MAG for its computer services. However, after six months the Foundation, after almost losing its PRO contract because of inadequate computer data, was forced to void its contract with MAG, an action regretted by both Boards of Directors.

Now, the MAG-spawned Georgia Healthcare Network is starting up and will require peer review. To bypass the established specialty review panels and peer review services of the Georgia Medical Care Foundation would be redundant and wasteful. The Steering Committee of the Georgia Health Network and the Board of Directors

of the Georgia Medical Care Foundation have expressed a desire to work together, and their continued cooperation should be applauded and encouraged.

In closing, I would like to commend the members of the MAG Board of Directors for their diligent performance and faithful attendance at our meetings. Since we have added representation from the Clayton-Fayette County Medical Society, our Board currently numbers 32 members and 23 alternates. All of us will continue to exercise our responsibilities to the best of our abilities, reflecting the wishes and opinions of our membership.

Membership Comparison

	1985	*1984*	*1983*	*1982*	*1981*
Active	5056	4879	4813	4559	4449
Active Intern/Resident	357	125	86	83	77
Affiliate	7	7	9	10	10
Associate	62	53	51	44	38
DE-1 (Financial hardship/illness)	48	48	50	55	65
DE-2 (Postgraduate training)	2	3	3	5	6
DE-4 (Temporary Duty — Armed Forces)	2	4	4	6	9
DE-5 (Life)	257	264	247	251	242
DE-7 (Over 70)	87	74	116	99	95
Retired	241	197	167	133	120
Service	62	63	59	57	60
Student	50	6	13	2	0
	6231	5723	5618	5304	5171
AMA MEMBERSHIP*	3416	3776	3719	3709	3948

*The above AMA membersip figures reflect only those AMA members who pay AMA dues via MAG

(12/31/85)

Secretary

Ralph A. Tillman, M.D.

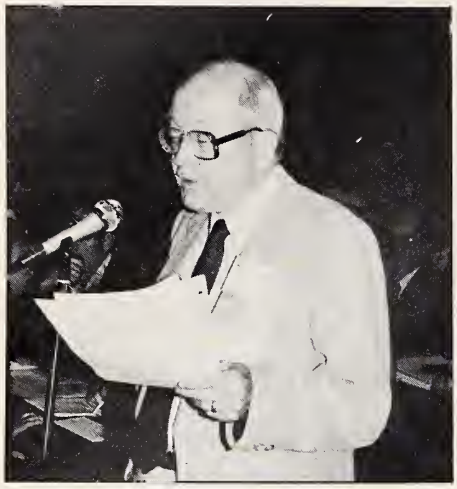
During the 1985 Session of the Georgia State General Assembly, I was approached about the prospects of my running for the recently vacated office of the Secretary of the Medical Association of Georgia. Shortly, thereafter, and in one of my weaker moments, I made the momentous decision (with the somewhat reluctant approval of my roommate) to go for it. Now, at 2:00 a.m. on March 6, 1986 I will attempt to put together some orderly thoughts about the past 12 months. Although I had discussed the position of Secretary with at least three past secretaries of MAG, little did I realize the full impact this position might have on one's life.

Gentle-people, colleagues in this beloved and beleaguered profession of ours, I wish to inform you in simple, non-contradictory terms, these past several months have produced moments of *darkness* and *enlightenment, sorrow* and *happiness, joy* and *despair, hope* and *hopelessness,* etc. Some of those closest to me have dramatically proclaimed that my near total involvement in MAG affairs — along with several other somewhat devastating events — has made me unbearable and intolerable at times. In a somewhat smug and moderately meek manner, I counter with the obviously correct explanation that I'm simply having a late mid-life crisis (in my late 50's). Let me assure you that *faith, love, courage* and the flame of *optimism* will win out over obstacles placed in our path.

I need not tell any of you (but I will) that the first few months in any new position, elected or otherwise, has to be viewed as a learning experience. And it has truly been that — through monthly Executive Committee meetings and quarterly Board of Directors meetings; some of which proved to be in the marathon category. In addition, your Secretary is expected to meet with other committees of MAG, and at times I have done so. Work and involvement with the Legislative Committee, Public Relations and Ad Hoc Committee on Medical Liability in our efforts to improve our civil justice system required more time than I thought possible. However, I must inform you that I was unable to attend the December Executive Committee in Washington, D.C. and failed you completely as Chairman of your Membership Committee (please see separate report). I have come to recognize my limitations and to rather reluctantly accept the premise that momentous changes in our society don't just happen — they require much time, thought, involvement and dedication.

The Medical Association of Georgia is a great democratic organization — not perfect — nor will it ever be; for like all organizations it is made up of people — and we are all imperfect (some more so than others). But MAG can, and will be improved only through and by its members. You can make of it what you wish. I have come to be impressed with the role your elected officials play in your organization and somewhat overwhelmed by the dedication exhibited by some. Basically, I have good vibrations about the leadership they are providing. Obviously, there are and will continue to be, some areas of involvement that I must frankly admit that I have not actively supported. It is general knowledge that I did not support the effort to establish MAG's IPA/HMO and still feel that there had to be better things for MAG to do than develop an alternative health care delivery system. However, by an overwhelming vote, the 1985 House of Delegates supported the venture and the product of that conception has now been birthed and is being nourished by approximately 2600 MAG participating physicians. Any day now it may well be discharged from the neonatal intensive care unit and eventually may surprise me (and others so philosophically disposed) by blossoming forth into a Goliath in the health care delivery scene. If so, then I will plan a gourmet course of crow and sheepishly proclaim that my lack of support did not prove to be a major deterrent.

There are many areas that we must



Standing at the microphone is Dr. Ralph Tillman, Secretary of the MAG.

continue to address. Permit me to briefly refer to *some* of these without going into any depth on any —

a) continued, intensive efforts in tort reform
b) increased, "grass roots" support from MAG membership
c) increasing MAG membership (2100 + non-MAG members practicing in Georgia)
d) absolute necessity that we become more involved in political affairs — through support of GaMPAC and PIP
e) development of "support groups" for those being decimated by being sued
f) Promotion of the many positive programs MAG offers to its membership
g) fulfill commitments to committee assignments

I have become thoroughly convinced that the MAG is and will continue to be, the major (if not the only), voice for the doctors of this state. We must always recognize, and support the premise that our profession encompasses individuals with widely divergent viewpoints — and further, that MAG must be the vehicle wherein those viewpoints can and should be expressed.

It's now 4:30 a.m. and time to go back to bed — this report is longer than I had planned. I humbly beg your indulgence. I must express my appreciation for the privilege of serving you in this capacity and unless I sense a movement to oust me from office (a la Marcos), I will make plans to serve you at least one more year to the *best of my ability* — hoping to find time to hit a few more golf balls and catch a few more fish, I earnestly solicit your support.

P.S. Without naming any or embarrassing others, I want to pass on to you my sincere feelings that we have an exceptionally fine, hard-working, devoted (by and large) and dedicated staff at MAG. To all of them, I wish to express my sincere appreciation for a job well done — and making mine easier.

Journal of the Medical Association of Georgia

Edgar Woody, M.D., Editor

Contents

During fiscal year 1985-86, the *Journal* has published a wide variety of articles of practical interest to clinicians around the state. Among the cover features for the year was the June issue highlighting Harrison L. Rogers, Jr., M.D., and his ascendancy to the AMA Presidency. This is the first time an MAG member has been pictured on the *Journal* cover.

Heat stress on athletes was the featured article for July, with the cover depicting a football player pouring water from a helmet to cool himself.

In September, we featured a beautiful image of the oil painting, *Portrait of Professor Gross, (The Gross Clinic),* to introduce the continuing medical education opportunities offered by MAG's Scientific Assembly.

Because October was designated Family Practice Month by Georgia's governor, we devoted that cover to the family practitioner and featured several articles about family practice.

With the stunning image of a woman's torso silhouetted on the cover, the November issue heralded our newly re-designed *Journal*. Two excellent articles and one especially insightful editorial on the subject of breast cancer were the focal points of that issue.

In December, the deleterious effects of the liability crisis was featured on the cover by showing a pregnant woman unable to gain access to an obstetrician's office because the practice had closed.

The January *Journal* featured Civil War memorabilia on the cover to highlight a well-researched and fascinating article about a confederate hospital, the Clayton, in Forsyth, Georgia.

Stroke, its prevention and rehabilitation, was the subject of the special issue in February sponsored by the Georgia Affiliate of the American Heart Association.

In March, we published another special issue devoted entirely to Auxiliary activities this past year. These are just a few of the issues and articles published in fiscal 1985-1986 by the *Journal*.

Credits

Our continuing editors continue to be active in the solicitation and review of articles submitted for publication. The MAG Executive Committee, which serves as our Publication Committee, continues to arbitrate in matters affecting *Journal* policy.

The monthly contributions of Dr. Logan's "President's Letters" have been especially throught-provoking and beautifully written. The fine contributions and advice given by members of the MAG Headquarters staff have greatly enhanced the scope of information published. Their continuing input is essential for the *Journal* to accurately reflect the wide variety of Association activities.

The American Heart Association, Georgia Affiliate, and the Georgia Chapter of the American Cancer Society have maintained their usual high standards in screening quality material for their respective specialty sections. The Georgia Thoracic Society has also been an active contributor of superior scientific articles. MAG's new General Counsel, David Poythress, now supplies the *Journal* with articles of interest for our Legal Section.

New Look for the Journal

As mentioned earlier, we launched an entirely new, more modern design of the *Journal* beginning with the November issue. The response from our readers has been overwhelmingly positive, and we sincerely appreciate their enthusiastic feedback. Full credit for the redesign is shared by our managing editor, Susan Dillon, and our cover photographer, Chuck Rogers. They labored many long hours to improve the appearance and readability of your *Journal*.

Personnel

Susan Dillon continues to serve capably and creatively as managing editor of the *Journal,* with secretarial assistant assigned by MAG.

Advertising

Since last year, our national billing of advertising revenues through the State Medical Journal Advertising Bureau (SMJAB) has increased by more than 24%. The new national sales force has continued to function well for our member journals. SMJAB has recently hired an organization devoted to the solicitation of non-medical advertising for our journals. It is hoped that this new effort will generate additional revenue through increased sales. Your exidor continues to serve as a member of the Board of Directors of SMJAB and attends meetings of this body twice yearly.

In addition to her other duties, our managing editor continues to supervise the administrative aspects of our local advertising. In fiscal year 1985-86, our local ad revenue increased by approximately 20%.

Conclusion

I am especially pleased with the conduct of the *Journal* this past year as it remains fiscally strong and carries a new, more modern design. We have a dedicated, capable staff that is committed to producing a superior publication, and I am gratefully honored to be a part of this endeavor.

The Greater Atlanta Coalition of Health Care, Inc.

H. Duane Blair, M.D.
MAG Representative to the Coalition

The Greater Atlanta Coalition on Health Care, Inc., was formed in 1982 for the purpose of establishing programs to assist employers, health care providers, health care insurors, and organized labor to help control the escalating costs of health care while protecting the quality of the services available. Grants from the Robert Wood Johnson Foundation in 1983 and 1985 and from the CIGNA Foundation in 1984 have enabled the Coalition to greatly expand its operating program.

During 1985, the major accomplishments of the Coalition have been (1) Implemented the Utilization Management Programs both locally and statewide. By the end of 1985, 50,000 employees were covered by the program and it is anticipated that this number will double in 1986. (2) Formed the Wellness Council of Atlanta in association with the Health Insurance Association of America and Life of Georgia. (3) Joined eight Georgia coalitions in forming the Association of Georgia Health Care Coalitions. (4) Received a $1.5 million implementation grant from the Robert Wood Johnson Foundation's community programs for affordable health care. (5) Held monthly programs for the benefit managers council. These programs are designed to assist personnel managers in Insurance Plan Modification. (6) Developed three data collection and report systems for the Utilization Management Program and developed a pilot out-patient data project which was funded by CIGNA Corporation.

During 1986, these activities will be continued and expanded. Additional problems of the health care community such as re-allocation of in-patient resources and uncompensated care for the uninsured will receive attention. Hopefully, an active legislative committee which can be of benefit both to the Coalition and to the Medical Association of Georgia can be established this year.

Medical Association of Georgia input has been quite helpful to the Coalition and will assume increasing importance in the future as the Utilization Management Program becomes statewide. It is my feeling that the Medical Association of Georgia should remain active both financially and with a member of the Board of Directors during 1986. The HMO-IPA being developed by the Medical Association of Georgia may well find an association with the Utilization Management Program for its utilization review on the statewide basis to be beneficial.

Judicial Council

C. Emory Bohler, M.D., Chairman

The Judicial Council met on June 9, 1986, and the following matters were brought before it.

1. The Council accepted jurisdiction of a complaint involving alleged deceptive advertising by an Atlanta physician group. Upon evaluation of all the available information the Council subsequently determined that the matter was properly within the jurisdiction of the Medical Association of Atlanta to which it was then referred.
2. The Council conveyed to the Constitution and Bylaws Committee its consensus that there is some ambiguity in Chapter II, Sections 1, 9, and 10 of the MAG Bylaws relating to the expulsion of a member whose license has been revoked, surrendered, or suspended. [Note: A proposed corrective amendment to the Bylaws, appears in the Report of the Constitution and Bylaws Committee.]
3. The Council rendered its opinion that the prohibition of Chapter X,

Section 4 of the MAG Bylaws against members of the Judicial Council serving in other MAG positions includes *all positions whatsoever* in MAG, not just those officers specifically named in Section 4. [Note: A proposed clarifying amendment appears in the Report of the Constitution and Bylaws Committee.]

4. The Council determined that it had no jurisdiction with respect to an attempt to appeal from a decision on a fee dispute by the Peer Review Committee of the Medical Association of Atlanta.
5. The Council accepted jurisdiction of a complaint involving alleged unethical billing of a patient. At the chairman's request, the President of MAG appointed an investigative jury. The jury has pursued its work which is continuing.

AMA Delegation

C. Emory Bohler, M.D., Chairman

Delegate's Report

1985 Interim Meeting of the AMA House of Delegates

Introduction

- The AMA House of Delegates met in Washington, D.C. December 8-11, 1985
- There were 371 delegates seated
 —296 delegates representing state medical associations
 —66 delegates representing national medical specialty societies
 —9 Section and Service delegates representing medical students, medical schools, resident physicians, hospital medical staffs, Army, Navy, Air Force, USPHS, and the Veterans Administration.
- *Address of the President.* Harrison L. Rogers, Jr., M.D., AMA President sounded an optimistic note in his address to the House. Negative attitudes on the part of physicians "are more than dangerous to the future of the medical profession than anything that is being imposed or anything that can be imposed on us." Dr. Rogers predicted that in the future the physician and the patient will enjoy a closer relationship because patients are better informed and will want more information on the disease and treatment. In that relationship nothing matters beyond the physician's compassion and desire to help the patient. "Nothing else counts," he said. "Not insurance coverage, practice setting, form of practice, nor method of payment. Those things are irrelevant to the doctor-patient relationship."
- Problems related to tobacco, alcohol, and other public health issues seemed to dominate the discussion and occupy the attention of the news media. A number of other issues affecting the future of medical practice and medical education were considered at this meeting.

Following are highlights of the Interim Meeting.

Tobacco

The AMA House continued to strengthen the Association's position against cigarette smoking and the use of other tobacco products, e.g., snuff and chewing tobacco. Firm in its resolve the delegates overwhelmingly supported new policies aimed at reducing death and disease caused by tobacco.
These new measures include:

- A ban on all magazine, newspaper, and billboard advertising of tobacco products through federal legislation.
- Increased participation by physicians in educating the public about the health hazards of tobacco.
- Improved publicity about the adverse health effects of snuff and chewing tobacco.
- Encouragement of government authorities to label all smokeless tobacco as a major health hazard.

1986 Budget and Plan

The House approved a 1986 fiscal year budget and plan based upon predicted operating revenues of $139.5 million and operating expenses of $135.9 million.

The new 1986 AMA plan calls for seven areas of emphasis and major initiatives:

1. Preserving the highest standards of quality of care for the American public.
2. Helping physicians respond to a changing practice environment.
3. Strengthening relationships within the medical community.
4. Revitalizing the AMA's membership growth.
5. Enhancing the AMA's health policy development process.
6. Expanding the collection, analysis, and dissemination of information related to medical practice concerns.
7. Securing the AMA's future.

Medicare Fee Freeze

The continuing freeze on reimbursement for physician services under Medicare caused much discussion. The Delegates took a number of actions in an attempt to gain some measure of relief which include:

- a resolution urging county, state and specialty medical societies to help the AMA in continuing an aggressive activity, both legislative and judicial as appropriate, to eliminate the discriminatory action of Congress in imposing an unfair *control of charges* for physician services under Medicare.
- a policy directing the AMA to intensify efforts to increase public awareness of the deleterious effects of the Medicare fee freeze on continued accessibility to physicians of the patient's choice.

- a resolution asking the AMA to continue to oppose and seek repeal of the unnecessary attestation statement on hospital medical records of all Medicare beneficiaries.

Professional Liability

The House considered two informational reports on the crisis in the professional liability.

- The AMA Committee on Professional Liability submitted a report that presented some chilling facts on the costs of professional liability.
 —14.5% to 17.5% of the $75.4 billion spent on physician services in 1984 represent costs generated by the current professional liability system.
 —the committee also reported that indirect costs of defensive medicine is estimated to be $17.5 billion and the loss of physician income for time on depositions and trial is estimated to be another $40 million.

The Special Task Force on Liability Problems also submitted a report on its major activities in four areas:

- education and community action
- legislation
- defense coordination, including the use of a toll-free hot line
- risk control/quality assurance activities

The House directed that the search for solutions to the liability crisis continue as the highest priority of the Association.

Public Awareness Program

The House considered reports on the continuing development of the AMA public awareness program and future plans for improving the physician's image.

The House approved a policy statement which:

- called upon the AMA to develop a national strategy to implement the program that will coordinate local efforts in the public awareness area.
- asked that educational materials be developed for the public regarding the impact of changes in the health care system on quality and access to care.
- created an advisory committee of five practicing physicians with some experience or exposure in public education/awareness programs.

State Licensure and Medicare Participation

The House learned that the AMA joined with the Massachusetts Medical Society in a suit opposing a new state law tying state licensure to Medicare participation. The Board of Trustees was praised for taking this timely action and the House overwhelmingly expressed opposition to this law.

The House adopted a policy statement calling on the Association to:

- maintain its vigorous opposition to the Massachusetts legislation.
- strongly affirm the policy that medical licensure should be determined by educational qualifications, professional competence, ethics and other appropriate factors necessary to assure professional character and fitness to practice.
- oppose any law that compels either acceptance of Medicare assignment or acceptance of the Medicare allowed amount as payment in full as a condition of state licensure.

Funding of Graduate Medical Education

The House adopted a comprehensive report submitted by the AMA Council on Medical Education that examined the current modes of funding graduate medical education and the proposed Medicare legislation affecting GME funding.

The report contained nine principles to guide the AMA in responding to legislative proposals and other challenges to the graduate medical education system.

1. Graduate medical education is an essential component of the education of all physicians. The health and well being of the American people are directly benefitted by the graduate medical education of physicians. Societal contributions to the financing of graduate medical education are appropriate.
2. The education of physicians in graduate medical education and the clinical care of patients are inextricably linked. Teaching hospitals should be fully reimbursed for the reasonable cost of residents' salaries and fringe benefits.
3. All payers of patient care costs should support graduate medical education in the institutions in which care for their beneficiaries is delivered. Support for both direct and indirect costs must include residents assigned to ambulatory care sites that are essential component of educational programs.
4. Funding from multiple sources should be available to support residency training programs.
5. Resident physicians should not be permitted to bill directly for patient care services.
6. In a period of fiscal constraint, first priority for Medicare funds for residents' salaries and fringe benefits should be accorded to graduates of medical schools accredited by the Liaision Committee on Medical Education or the American Osteopathic Association. Cessation of support for foreign medical graduates should be phased in over an appropriate time period.
7. Medicare legislation should not be the vehicle for the establishment and implementation of national physician manpower policies. If required, physicians manpower policies should derive from a careful, deliberative process in which educators, the medical profession, and the public participate.
8. Residents should be compensated reasonably in all programs throughout the nation. Uncompensated and under-compensated positions should be discouraged.
9. Reimbursement for patient care by all payers must be adequate to sustain the nation's teaching hospitals. Adequate indirect cost payments under Medicare should be continued. Government must consider and fund separately the care of the nation's indigent.

Therapeutic Substitution of Drugs

The House adopted a report describing AMA activities in monitoring state legislation that would authorize pharmaceutical or therapeutic substitution of a physician's prescription. The report also provided examples of therapeutic substitution that may result in harm to patients.

The House affirmed AMA policy to vigorously oppose any concept of prescription drug substitution without the prescribing physician's authorization.

AMA Action Plan for AIDS and Related Conditions

The House adopted a report describing an AMA action plan to disseminate information about AIDS to physicians and to establish physicians as the most credible accessible sources of AIDS information.

The report noted that:

- As of October 1985 over 14,000 cases of AIDS had been reported in the U.S.
- Over 1,000,000 persons are estimated to be infected with the AIDS retro-virus.
- AIDS has the potential of becoming the major lethal pandemic of the century.

Boxing

The House of Delegates reaffirmed AMA's opposition to boxing established at the 1984 Interim Meeting.

This earlier policy states that the AMA:

1. Encourage the elimination of both amateur and professional boxing, a sport in which the primary objective is to inflict injury;
2. Communicate its opposition to boxing to appropriate regulating bodies;
3. Assist state medical societies to work with their state legislatures to enact laws to eliminate boxing in their jurisdictions; and
4. Educate the American public, especially children and young adults, about the dangerous effects of boxing on the health of participants.

Conclusion

AMA House meetings provide a unique educational opportunity and I would encourage you to attend and participate. Any member of the Association may present testimony at the Reference Committee hearings and, of course, corridor discussions on the issues provide additional opportunities to get your views across.

If you can't come to the meeting you can still be represented through your delegate. Let your delegation know your opinions. You can also prepare a resolution and request that it be submitted to the House.

Many AMA policies began with an individual physician who had a good idea and coaxed it through the democratic process.

Auxiliary to the Medical Association of Georgia

Mrs. Dent W. Purcell (Ann), President

Theme for 1985-86: "Caring, Sharing, Learning"

Organization

There are thirty nine county auxiliaries encompassing 96 counties: Baldwin, Bibb, Carroll-Haralson, Cherokee-Pickens, Clayton-Fayette, Cobb, Colquitt, Crawford W. Long, Decatur-Seminole, DeKalb, Dougherty, Flint, Floyd-Polk-Chattooga, Franklin, Georgia Medical, Glynn, Gordon, Hall, Hart, Jackson-Banks, Laurens, Medical Association of Atlanta, Muscogee, Newton-Rockdale, Ogeechee River, Peachbelt, Randolph-Stewart-Terrell, Richmond, South Georgia, Sumter, Thomas Area, Tift, Troup, Upson, Walker-Catoosa-Dade, Walton, Ware, Wayne, Whitfield-Murray.

County Auxiliary Organized

Walton County Medical Auxiliary — 13 Charter Members.

Membership

As of March 11, 1986, Membership is 2361.



The 1985-86 President of the Auxiliary to the MAG, Mrs. Dent W. (Ann) Purcell, of Garden City, addressing the MAG House of Delegates.

The President visited and spoke to the auxiliaries on legislation: Tort Reform; Older Americans: "Aging is Becoming"; Mental Health: Teenagers — Postponing Sexual Involvement; and Substance Abuse. The organ procurement program was also emphasized.

Allied Organizations Visited

Meetings attended were: AMA Auxiliary Convention in Chicago, Illinois; Auxiliary AMA Leadership Confluence in Chicago, MAG Leadership Conference in Atlanta.

Materials Implemented or Continued

1. Teenagers: Postponing Sexual Involvement Tapes and Literature.
2. Substance Abuse: School book covers and library with films and literature housed at MAG.
3. Older Americans: Medifile Cards.
4. "It's OK To Tell," Child Abuse video and literature; "Someone to Talk to," Puppet Show.
5. Education Learning Center.
6. Pulsation Newsletter.
7. Auxiliary issue of the Journal to MAG.
8. Fourteen (14) Auxilians appointed to MAG Committees.
9. Pilot Survey in ten (10) Public Schools — Health Risk.
10. Organ Procurement: "Don't take your Organs to heaven; Heaven knows we need them here!"
11. State Project Bank: A resource center of successful projects submitted by county auxiliaries.

State Meetings and Speakers

Post-convention Executive Board Meeting was held in Savannah, Georgia, April 27, 1985.

Summer Executive Board Meeting and Workshops, Macon, Georgia. Dr. Marion Howard, Speaker, "Teens: Postponing Sexual Involvement; Ed Bradshaw on Organ Procurement; Sherry Waronker and Susan Nickerson on Legislation: Liability Crisis.

Winter Executive Board Meeting, Ritz Carlton, Atlanta, Georgia. Speakers: Dr. and Mrs. William Farley, "The Impaired Physician and the Spouse of the Impaired Physician;" Mrs. Linda Nance, A-AMA Health Committee member; Dennis Lockridge, DHR; Rusty Kidd on Legislation.

Allied Health Careers Clubs of Georgia, Annual Meeting was held in April.

Legislation Conference, Atlanta. Guest: Mrs. Joe Frank Harris.

Annual Convention, Callaway Gardens, Pine Mountain, Georgia, April 25-26, 1986. Speakers: Lt. Governor Zell Miller; Mrs. Mylie E. Durham, Jr., AMA Auxiliary President Elect; Mrs. Frank E. Morgan, SMA-Auxiliary President; Dr. William Logan, Jr., President of MAG.

President visited the following auxiliaries: Baldwin, Bibb, Carroll-Haralson, Clayton-Fayette, Cobb, Crawford W. Long, DeKalb, Dougherty, Floyd-Polk-Chattooga, Franklin, Georgia Medical, Glynn, Hart, Laurens, Medical Association of Atlanta, Muscogee, Newton-Rockdale, Ogeechee River, Peachbelt, Richmond, Sumter, Thomas Area, Tift, Walker-Catoosa-Dade, Walton, Ware, Wayne, Whitfield-Murray. Also visited with the presidents of Cherokee-Pickens and Randolph-Stewart-Terrell.

President traveled across the state visiting and speaking to medical societies, civic organizations and legislative events — Topic: Liability Crisis.

Projects — State

AMA — Educational and Research Foundation Fund Raising Drive: Selling "I love my doctor" T-shirts: $2000.00 as of March 1, 1986; Raffle at Summer Boards resulted in a $395.00 profit; a large quilted wall hanging, embroidered with the name of all participating counties (total of 28) resulted in a $1575.00 profit. This framed hanging was presented to MAG in April, 1986, and will bedisplayed at MAG Headquarters.

Auction at Winter Executive Board Meeting, netted $1362.75.

The Holiday Executive Board Sharing Card amounted to $1040.00 with 35 Executive Board members participating. To date (March 1), the A-MAG has contributed to AMA-ERF $24,041.28 and contributions are still being received.

Shape-Up For Life: Older Americans: Aging is Becoming: Medi-File cards distributed to citizens 65 years old or older.

Substance Abuse: Library with films and literature housed at MAG. Materials are available to all Georgia auxilians for use in their communities. Bookcovers on Substance Abuse were distributed to 6 & 7th graders throughout Georgia.

Nutrition Survey: In cooperation with MAG and DHR a survey was conducted. It was a pilot program completed in ten area high schools concerning health risk. Students were asked questions on smoking, exercise, auto safety, sexual activities, drugs, stress, etc. Computer printouts were given to students so they may get assistance in problem areas.

Organ Procurement: Posters "Don't take your organs to heaven, heaven knows we need them here!" were distributed throughout the state.

Mental Health: Teens — Postponing Sexual Involvement is an educational series developed by the Department of Gynecology and Obstetrics at Emory University and the Teen Services Program of Grady Memorial Hospital. Auxiliaries throughout the state have approached local school systems and have acquainted them with the "Postponing" curriculum. Also several auxiliaries have used the materials to conduct seminars for youth groups. The series comes with slides, tapes, and a detailed leader's guide.

Auxilians throughout the state have continued their involvement in "It's Ok To Tell" Child Abuse Project. Also the activity book entitled "It's Ok To Tell" has been distributed.

William R. Dancy, M.D., Student Loan Fund had contributions totaling $2025.85 with 13 counties participating.

Medical supplies and contributions were sent to Colombia and Mexico.

Legislation: Tort Reform — Auxilians attended MAG leadership conference in Atlanta.

Over 2500 auxilians and their spouses visited the legislators at the State Capitol on February 4, 1986 expressing their concern on the liability crisis.

Doctor's Day, March 30, was observed throughout the state.

Project Bank: Resource Center for county auxiliaries to share their successful projects.

Publications

Directory was distributed to each auxiliary member.

Annual Report was prepared with each county auxiliaries' activities for the year, and distributed.

Pulse Line — (3 issues) mailed to all members.

Pulsation — a newsletter (3 issues) mailed to all members.

Book: History of Medicine in Georgia 1733-1983 by Evelyn Ward Gay continues to sell.

Educational Learning Center Brochure prepared.

Membership brochure for potential members and members-at-large prepared.

County Projects

Counties implement projects in their communities that meet their needs. County auxiliaries also participate in state projects. The grass roots of the organization are the counties.

The county auxiliaries are involved with many programs. To name a few: teen pregnancies, child abuse, substance abuse, MADD, SADD, black mothers; GEMS; Services for the Ag-

ing: Escort Service, Meals on Wheels, MediFile cards; Health Education: immunization, Learning Center, sex education, organ donation, Vial of Life; Safety — screening for hearing, seeing, etc.; Scoliosis, Child Car Restraints, Poison Prevention; giving scholarships; sponsoring health fairs (drugs and supplies); Nutrition, volunteers for hospice, blood drives and self breast examination clinics.

Each year the county auxiliary members give of their time — volunteering their services to the community. This truly shows that this organization works to continue the improvement in health care for all Americans.

We are proud to have had appointed this year 14 auxilians to serve on MAG committees.

The MAG Committee on the Auxiliary consisting of seven physicians has been very helpful to the Auxiliary.

Medical Association of Georgia Resident Physician Section

K. Kramer, M.D., Chairperson

The Medical Association of Georgia Resident Physician Section is in its second "official" year after a lengthy period of organization. Once again, our Residents' Section has made considerable strides:

Membership: Statewide our members have grown from 102 in July of 1984 to 370 "I&R" members of MAG. We still have a long way to go in our recruitment efforts, but with the help of our respective county medical societies and MAG staff, we plan to continue building our membership strength.

Here I wish to express my thanks to MAG Mutual Insurance Company for its support of our efforts. By agreeing to pay residents' first year membership dues, MAG Mutual gave our recruitment efforts a real boost.

Local Activities: In the past year our Section has begun to place more emphasis on informal social functions



Representing the Resident Student Physicians at the House are (left to right) K Kramer, Paul Dickson, and Ann Marie Reither.

where we can spread the word about MAG. Thus, we have hosted get-togethers with pizza and soft drinks for residents at Grady and Crawford Long. In Savannah we have spoken with residents at a local restaurant, and during a lunchtime hospital conference. Our Section Secretary, Regina Benjamin, M.D., has also been successful in arranging pharmaceutical company support for meetings of Macon residents.

In addition, our Section hosted a very well attended luncheon meeting of residents during the MAG Scientific Assembly last November (we secured drug company funding to help cover costs). Another highlight of the past year was our Interim Meeting, held last October in Atlanta, where our guest was Ross Rubin, Director of Federal Legislation for the AMA, speaking on the impact of federal funding cuts for residency programs.

Communications: Our MAG RPS Newsletter, *Central Line*, is mailed to all Georgia residents on a quarterly basis. Bringing word of MAG activities plus news of special interest to residents, *Central Line* is proving to be a worthwhile means of communication for our Section.

AMA Activities: At both meetings of the AMA Resident Physician Section, (which preceded the Annual House of Delegates in Chicago last June, and the Interim House in Washington, D.C. last December), our Section was represented by five to seven resident leaders from our state. This is a sizable contingent, reflecting healthy participation by our State Section in national affairs.

Georgia residents have also assumed positions of leadership in the AMA. The Resident position on the AMA Council of Medical Education was won by myself, at elections held during the AMA Interim Meeting. And Ron Davis, M.D., is unopposed for reelection as Resident member of the AMA Board of Trustees.

I would like to conclude by once again thanking the MAG Executive Committee and Board of Directors for their continuing support and interest in our Resident Physician Section. I would also like to express appreciation to the Section's other officers who have done so much to contribute to our progress this year:

Anne Marie Riether,
Vice Chairperson
Regina Benjamin, Secretary
Paul Dickson, Delegate
Steve Wilson, Alternate Delegate

Medical Association of Georgia Medical Student Section

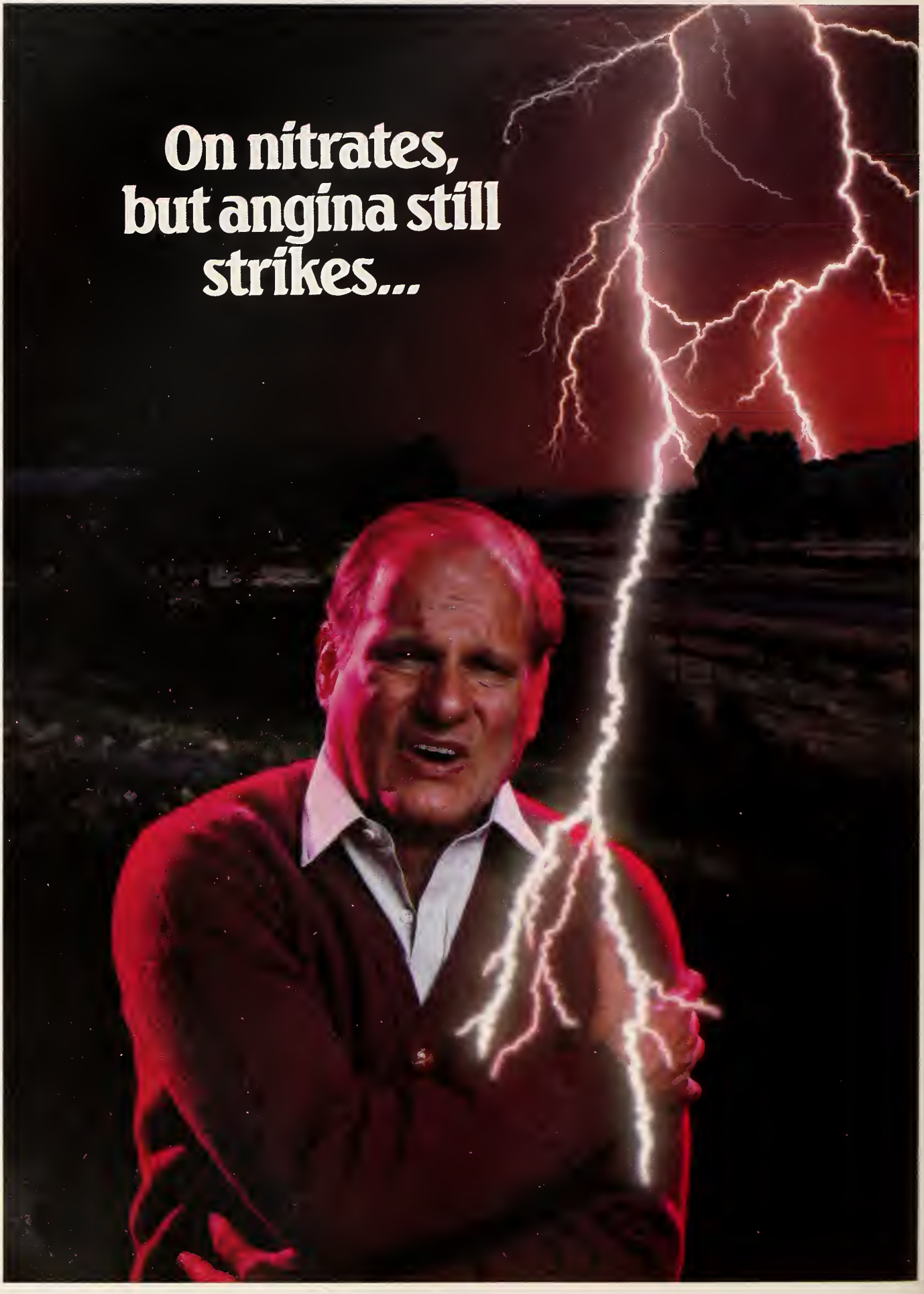
Earl Mullis, Chairperson

The 1985-86 year is only the second year that the MAG-MSS has been officially recognized by the MAG. The past eleven months have seen the continuation of previous projects, and initiation of new ones. Under the direction of the MAG-MSS Executive Council many accomplishments have been achieved by our Section.

Membership. Since the formation of the MAG-MSS, membership recruitment has been our organization's primary goal. This past June the MAG Executive Committee decided to discontinue the ten dollar membership dues for entering freshmen. This new policy, along with the recruiting efforts of MAG-MSS members, resulted in a four-fold increase in MAG-MSS membership. The membership increased from less than 10 student members one year ago to the current membership of over fifty members.

It is important to note, though, that virtually all of those new members are students at Mercer University


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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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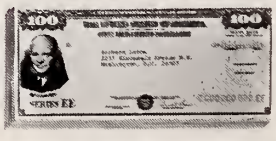


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School of Medicine, where our Section launched a particularly vigorous membership drive.

MAG-MSS Membership Brochure. Our Section also printed an effective membership brochure during the past year. It highlights the MAG logo and the insignia of each Georgia medical school. The document contains important information about our organization as well as the names of local contacts for interested students.

MAG-MSS Newsletter. Under the editorship of Robert Campbell our Section Newsletter took on a new look, a new format, and a new name, *MURMURS*. Mr. Campbell also appointed deputy editor's from each of the medical schools. It is the deputy editor's responsibility to prepare feature articles about his respective school. *MURMURS* also contains articles about medical student research, editorials, and a calendar of events. We hope that the improved appearance and content of the newsletter will be a definite asset in future recruitment.

National Activity. During the past year Georgia sent more medical students to the AMA-MSS national convention than ever before. These representatives were not only present at the conventions but also very active in policy-making. The Georgia student delegation submitted several resolutions which were overwhelmingly supported by our AMA-MSS colleagues from other states. The Georgia delegation was also influential in defeating resolutions which we did not feel were in our Section's best interest.

Also, Georgians became involved in AMA-MSS leadership. At last June's meeting in Chicago, Aaron Davidson was a member of the Rules Committee and Georges Maliha ran for a position on the AMA-MSS Governing Council. Steve Dawkins continued his work on the AMA *Ad Hoc* Committee on Young Physicians, and was one of four medical students who applied for the student position on the AMA Board of Trustees. He will also be a candidate for the AMA-MSS Governing Council this June.

On the state level, I was appointed to serve on the MAG Committee on Medical Schools and attended the MAG Conference on Medical Education last fall in Athens.

As Chairperson of the MAG-MSS, I would like to thank my colleagues on the Executive Council for their hard work this year. I would like to commend Mr. Steve Davis for his continued unexcelled support and involvement with our organization. On behalf of the MAG-MSS, I also wish to express appreciation for the continued support of the MAG and for its commitment to the medical students in Georgia.

Georgia Medical Care Foundation

Luther M. Thomas, Jr., M.D., President

The past few years have shown a marked increase in interest in Utilization Review and Quality Assurance programs by every type of third party payor of health care costs. Along with this increased interest has come a proliferation of organizations involved in various types of utilization review activities. The community at large no longer views utilization review programs as being solely the province of physician directed organizations. Accordingly, the Foundation Board has come to realize that passive offering of our services is insufficient in the face of serious competition. We will be more aggressive in marketing our utilization review and quality assurance programs in the future.

The past few years have also been a period of remarkable growth at the Foundation. Our operating budget is now approximately double the 1984 budget. Square footage occupied in our Atlanta office has gone from less than 10,000 useable square feet to over 13,300 square feet. Much of this growth is attributable to the PRO program which, due to the nature of the review required, has changed from the largely delegated review of the PSRO era to a review conducted completely by GMCF staff and consultants. At the close of the PSRO program, we had 31 employees in that department, whereas today we have 121.

We have, however, seen the growth in our other departments as well. The Nursing Home department has grown from 33 employees in 1984 to 42 employees today. This also is due to expanded review requirements.

PRO Program

New programs always seem to be subject to modifications, but the early days of the PRO program were fraught with an unusually large amount of rules changes, new regulations, interpretations and reinterpretations. Constant changes lead to frustration among all parties concerned, and in this case, changes frequently are thought to be generated by GMCF. In fact, the PRO program allows for even less flexibility by the local organization than the PSRO program. Further, many aspects of the PRO program are direct irritants to the physicians. Such things as attestation statements with penalty clauses, disputes over the legality of physicians' signatures, negative letters sent directly to patients and limited appeal rights are certain to raise the ire of physicians under review. Naturally, this anger is directed towards the PRO and even more unfortunately, there is nothing the PRO can do to correct these situations. It is hoped that more onorous regulations will not be forthcoming.

We have reviewed the new Scope of Work and have prepared a proposal in response to it for renewal of our contract. Much of the regular review work aimed at reducing manipulation of the payment system unfortunately remains. There is, however, a marked shift towards more and better quality assurance activities to be implemented by the PROs. We see this as a positive direction for the PRO program. Hopefully, as the program matures, quality assurance activities will become paramount as opposed to cost containment efforts.

Private Sector Review

There are many different organizations involved in utilization review today. HMOs all have utilization re-

view systems, usually operated internally. Insurance companies find it necessary to conduct review as their customers demand it. Other payors contract with one of the many organizations in the business of offering utilization review services. Physicians have expressed concern over the proliferating number of pre-admission certification programs they must be aware of. Hospitals are becoming increasingly concerned over the number of utilization review systems with which they are asked to cooperate. Due to our PRO contract, we must do review at all the hospitals, and we must maintain a pre-admission certification system. It has been suggested to us that as everyone knows they will have to work with us, that we should attempt to expand our market share of those seeking review from the private sector. We will be intensifying our efforts to sell our services, and hope to be sufficiently successful that we will at least discourage additional companies from starting new services. Hopefully, the number of companies involved will actually decline.

Become Involved!

Although hundreds of physicians regularly work with us as consultants, we welcome additional physicians to our consultant roster. We know that review of medical services will continue, at least for the foreseeable future, and the best way to insure that review is of high quality is for privately practicing physicians to offer their expertise in the review system.

Recommendation

That of the House of Delegates approve the resolution supporting GMCF as the physician sponsored medical review organization in the state of Georgia.

Auxiliary Committee

Dent W. Purcell, M.D.

The Committee on the Auxiliary met twice this year. They also met a third time at the Pre-convention Luncheon at Callaway Gardens in April. The first meeting was with the Executive Board of the Auxiliary (Post-convention Meeting) at the Hyatt Regency, Savannah, April 27, 1985. At that time, the committee met the Executive Board Members.

The second meeting of the Committee on the Auxiliary was held at the Hilton in Macon on May 17, 1985. The following plans were discussed and approved by the committee:

1. AMA-ERF fund raisers would be through Holiday Sharing Cards, "I love my doctor tee shirts," participation on wall hanging for the Medical Association of Georgia, and auctions and gift wrapping paper sales. These projects have been done throughout the state.
2. An auxiliary issue of the *Journal of the Medical Association of Georgia* would be requested. This issue was the March 1986 edition.
3. Health Projects:

A) Allied Health Careers: This project has been continued.

B) Impaired Physicians Project: Donations of money have been collected during the year. A program was presented at A-MAG Winter Executive Board meeting.

C) International Health: Medical supplies collected and sent to Colombia and Mexico.

D) Learning Center: Has three phases; each phase was to be reemphasized during the year. Portions of the Learning Center were purchased by several auxiliaries.

E) Mental Health:

I. Child Abuse: Puppet show "Someone to Talk to" was approved and has been performed throughout public and private schools in Ga.

II. Teens: Postponing Sexual Involvement: the series Postponing Sexual Involvement includes leader's manual, slides and cassettes; has been presented throughout Georgia. The State of Georgia has made time available in the 8th grade in their curriculum guide for schools for this series to be introduced.

F) Nutrition Survey: The survey is a pilot program conducted in ten area high schools concerning health risks.

G) Organ Procurement: Program at Summer Executive Boards. Posters "Don't Take Your Organs to Heaven, Heaven Knows We Need Them Here" and other informative materials were distributed throughout the state.

H) Safety:

I. Substance Abuse: A Substance Abuse Library housed in the Auxiliary Room at MAG contains films, books, etc. available to any A-MAG member. Substance Abuse Bookcovers were distributed to school children in Georgia.

II. Shape Up For Life — Older Americans (the emphasis from A-AMA): Medi-file cards for citizens 65 or older were distributed throughout the state.

4. Legislation — Planned a "Day at the Capitol." Counties to continue their key contact program. MAG Leadership Conference, February 2-4 — a luncheon was attended by some 160 doctors' spouses. Some 2500 physicians and spouses made a mass visitation to the Capitol February 4 to visit their legislators and to air their concern about the liability crisis in Georgia.
5. William R. Dancy, M.D. Student Loan Fund: Money has been collected through gifts and memorial donations.
6. Membership: Worked as a team with MAG to promote a positive image for the physicians and the Auxiliary.
7. The Advisory Committee approved the following dates for state meetings: Summer Executive Board, Macon, July 15 & 16, 1985; Winter Executive Board, November 11-12, 1985, Atlanta; and the Annual Convention, Callaway Gardens, April 25-26, 1986.

A special thanks to each of the members of the committee who have served this year.

Building and Land Committee

H. Duane Blair, M.D.

The Building and Land Committee did not meet this year. However, we wish to report that the lower level of the building is now leased to the Georgia Health Network. The annual rental is $20,000 for approximately 2,000 square feet. Fortunately, major building repairs were not needed this year.

We continue to believe the value of MAG's Headquarters is enhanced due to rapid changes in the neighborhood. A major office building is now under construction directly across Peachtree from our building. Other buildings in the area have been refurbished. The addition of the Marta station has given impetus to major changes in the Headquarters locality.

The Committee will continue to assess real estate values in the area so that a decision can be made on the advantages of retaining or selling the building.

Computers in Medicine Committee

William Headley, M.D.

MAG's Computers in Medicine is a new committee that is actually not so new. Its predecessor, the MAG Committee on Computer Education, was created in February 1984 to oversee MAG's efforts to market the AMA/GTE Medical Information Network. Eventually, however, our Association's relationship with GTE began to sour, leading to GTE's termination of MAG's contract in February of 1985. Because of this termination, the principal task of the Committee was removed. The MAG Executive Committee therefore disbanded the Computer Education Committee in May of last year.

Computers haven't gone away, of course, and in fact their increasing relevance to practicing physicians has impelled MAG to address the subject. This time, the Executive Committee approved a much more wide-ranging charge when it authorized this Committee on November 24 of last year:

> The Committee is charged with investigating and developing information on the applications of computers in medicine. The Committee should be available to assist physicians in gaining computerized access to medical information resources, as well as to advise physicians on various commercial hardware and software products. The Committee should also explore the possibility of developing computerized communications or teleconferencing capabilities for physicians in Georgia.

We have brought together as our Committee membership physicians from all over the state who not only are interested in computers, but have them in their office or home and use them regularly.

Our Committee has already met (in Milledgeville, March 15) and began to stake out areas for activity. Here are some of the projects we are discussing.

Georgia Interactive Network for Medical Information (GaIN)

In the fall of 1984, with the help of the Mercer University School of Medicine and a grant from the National Library of Medicine, the GaIN system began operations. Its features are attractive to physicians, especially those in rural areas or small towns who desire immediate access to the growing body of medical information available these days via computer database. Through GaIN, anyone with a micro-computer and modem is able to sign up and receive an "800" phone number to use in calling up the computer. Online, the physician can quickly obtain access to medical libraries' materials; the physician can call on consultants in his or her field; can do a MEDLINE search at the National Library of Medicine; and can use electronic "bulletin boards" to communicate with other members of the GaIN network.

We see in this system a great potential for service to MAG members, particularly in instantaneously disseminating to doctors and county medical societies, important information on tort reform, our Georgia Health Network, and other MAG projects. We hope to report on our progress in the near future.

Paperless Claims

It is well known that physicians can more efficiently process their insurance billing, and receive much speedier payment, through the use of computerized transfer of paperless claims.

A while back some sixteen major insurance companies, except Blue Cross/Blue Shield, formed the National Electronic Information Company (NEIC). NEIC and the Blues are proceeding with the implementation of their claims processing systems without agreeing on a uniform standard of computerized operation. It may be that physicians will get caught in a squeeze by this computerization, as we must pay for extra computer equipment in order to deal with both the Blues and the NEIC forms.

Our Committee has already begun to discuss ways of dealing with these issues. More later on this.

Computers for Physicians' Use

We are aware that many doctors are discouraged from joining the GaIN Network and subscribing to online databases because of unfamiliarity with computer terminals, modems, etc. Frequently the question from physicians is, "What should I buy?" We believe that doctors should first decide for themselves what they want their computer to do for them. But as a rule we think that a PC-compatible unit (for under $2000) is a good starting piece of hardware. If the physician is strictly interested in accessing databases and communicating by computer, a "dumb" terminal and modem, costing about a thousand dollars, may be sufficient. Our concern here, though, is that most physicians will soon outgrow this simple equipment, and become frustrated. In any event, we are in the process of evaluating these various hardware

products, and have already begun talking with several vendors. Our hope is to be able eventually to offer our colleagues a range of recommendations regarding their various computer needs.

Clearly, the time has arrived for computers in medicine. The subject may be complex, but it is compelling and challenging. I therefore wish to thank the following physicians for accepting service on this Committee. Our work is already beginning to benefit from their enthusiasm and commitment:

Abdulla M. Abdulla, M.D., Augusta
James A. Brannon, M.D., LaGrange
Thomas W. Carswell, M.D., Atlanta
Robert R. Collins, M.D., Americus
David Harvey, M.D., Warner Robins
Ken Lindyberg, M.D., Griffin
Sam Mandel, M.D., Macon
William C. Pfister, M.D., Tifton
R. Dwayne Purser, M.D., Jesup
William Rawlings, Jr., M.D., Sandersville
Reuben Roberts, M.D., Hawkinsville
George W. Shannon, M.D., Columbus
Tyson D. Smith, M.D., Covington
Norman Worsley, M.D., Warner Robins
John Zimmer, M.D., Macon

Continuing Medical Education Committee

John A. Harrel, Jr., M.D.

Through its work this past year, our Committee continues to maintain its record of efficient service in promoting continuing medical education across the state. Our activities have been channeled in several areas.

Accreditation

Our main job as a committee remains advising and accrediting Georgia organizations and institutions which provide continuing medical education. In the past year we've resurveyed seven hospitals, and four state or local specialty societies, and extended their period of accreditation according to their ability to meet the ACCME *Essentials* for Category 1 continuing medical education. We've also conducted an initial survey visit of the Augusta Obstetrical & Gynecological Society, which seeks accreditation from MAG as a provider of Category 1 CME.

As of this writing, fifteen specialty societies and nineteen hospitals in the state are accredited for CME by the MAG. They are:

American Academy of Pediatrics, Georgia Chapter
American Cancer Society, Georgia Division
Athens General Hospital
Atlanta Society of Pathologists
DeKalb General Hospital
Georgia Academy of Family Physicians
Georgia Academy of Family Physicians Educational Foundation
Georgia Affiliate, American Heart Association
Georgia Baptist Medical Center
Georgia Gastroenterologic Society
Georgia Orthopaedic Society
Georgia Psychiatric Association
Georgia Radiological Society
Georgia Rheumatism Society
Georgia Society of Anesthesiologists
Georgia Society of Ophthalmology
Georgia Surgical Society
Glynn-Brunswick Memorial Hospital
Greater Atlanta Otolaryngology/Head and Neck Surgery Society
John D. Archbold Memorial Hospital
The Medical Center (Columbus)
Memorial Medical Center
Metropolitan Hospital
Northeast Georgia Medical Center
Northside Hospital
Phoebe Putney Memorial Hospital
Piedmont Hospital
Scottish Rite Hospital
South Fulton Hospital
St. Joseph's Hospital
Sumter Regional Hospital
University Hospital
VA Medical Center — Dublin
West Paces Ferry Hospital

Cosponsorship

From time to time our Committee is asked to authorize Category I AMA continuing medical education credit for CME meetings planned by various organizations. To deal with these requests, our Committee has developed guidelines for cosponsorship of CME activities.

a) The Committee will consider fulfilling the role of cosponsor for CME programs developed by the following organizations in Georgia: county or district societies; community hospitals; state or local specialty societies; voluntary health agencies; other Georgia-based medical groups and clinics.
b) the primary sponsor is required to complete an application for cosponsorship, specifying content, faculty, administrative planning, means of evaluation, etc., for the proposed CME activity. The Committee reviews and evaluates each application, and renders a decision on cosponsorship.
c) Each application must be accompanied by a fee of $75 for CME activities of six hours or less, and $100 for activities of more than six hours' length.

In the past year, we have reviewed almost two dozen applications for cosponsorship, and have agreed to cosponsor the following CME activities.

1) Gwinnett-Forsyth County Medical Society, June 7, 1985: Dr. Douglas Wolf, "Cytoprotection: A New Concept in the Treatment of GI Erosions"
2) Humana Hospital, Augusta, July 25: "Humana Burn Medical Education Symposium"
3) Hutcheson Medical Center, Fort Oglethorpe: three medical conferences, August 19, September 17, and November 18, 1985
4) Ridgeview Institute, September 19-20, 1985: "The Treatment of Sexual Issues in Family Therapy"

5) DHR District III EMS, October 25-26, 1985: "Emergency Medical Services: Perspectives for Georgia Ambulance Service Medical Advisors"
6) Georgia Society of Internal Medicine, October 25-27, 1985: "Computers and the Physician"
7) DHR Community Health Section, October 27-30, 1985: "Perspectives in Public Health"
8) Georgia Chapter, American Correctional Health Services Association, November 14-16, 1985: "Correctional Health Care — Anticipating the Future"
9) St. Joseph's Hospital, Savannah, April 5, 1986: "Office Orthopaedics for Primary Care Physicians"

INTRAV

At MAG's 1984 House of Delegates, our Committee expressed its concern over the quality of CME seminars being offered during the INTRAV vacation-travel program, which MAG cosponsors.

We are pleased to report that within the past year we have secured INTRAV's concession that it will only offer for MAG members CME seminars that carry Category 1 credit. The authorization of such credit, issued by the Southern Medical Association, Medical University of South Carolina or other institutions, serves as a control over the quality of the CME program. Our Committee is therefore satisfied that its concerns have been addressed.

We wish to express particularly our appreciation to Mr. Fowler, MAG's Executive Director, for securing INTRAV's agreement regarding its educational seminars.

AMA Physician's Recognition Award

Another development on which we'd like to report involves the American Medical Association's Physician's Recognition Award. The PRA was established in 1968 by the AMA House of Delegates as a voluntary award to encourage physicians' participation in continuing medical education.

Originally the PRA set our six categories of learning activities in which physicians could claim credit, ranging from attending accredited CME meetings (for Category 1) to lecturing, writing articles, self-instruction, etc. These latter categories, 2 through 6, have always tended to be a little cumbersome. They also raised questions about the relative worth of various learning activities, as some physicians inferred that a ranking system was intended by the numbered categories.

To clear things up, the AMA House has approved a revision of the category system. Henceforth, there will be two categories of credit, as follows:

1) CME Activities with Accredited Sponsorship or Cosponsorship
2) All other Categories of CME [includes CME Activities with Non-Accredited Sponsorship, Medical Teaching, Papers, Publications, Books and Exhibits, and non-supervised CME, (Self-Instruction, Consultation, Patient Care Review and Self-Assessment). (Former Categories 2 through 6).]

As before, the PRA requires 150 hours of credit over a three-year program; at least 60 of these hours must be in Category 1.

Upcoming ACCME Survey

MAG is authorized to accredit *intra*state providers of CME, such as Georgia specialty societies and hospitals, by the Accreditation Council for Continuing Medical Education (ACCME). Last year the ACCME began the process of surveying each state medical association to determine whether our procedure for intrastate accreditation is in conformity with the national guidelines for CME, which are the ACCME "Essentials."

This fall the ACCME will come to Georgia to conduct its survey of our Committee's accreditation work. We have already begun a revision and improvement of our accreditation survey and resurvey applications, and we anticipate more work ahead of us as we prepare for the national survey visit.

We will report on this event next year at the House.

All of this work could not be done were it not for an impressive group of energetic physicians who are committed to ensuring for the Medical Association of Georgia an influential role in continuing medical education. They are:

Glen E. Garrison, M.D., Augusta
T. Schley Gatewood, Jr., M.D., Americus
John A. Hudson, M.D., Macon
Thomas D. Johnson, M.D., Albany
James S. Maughon, M.D., Atlanta
Victor A. Moore, M.D., Augusta
Hillary R. Newland, M.D., Athens
Neil G. Perkinson, M.D., Atlanta
Carl L. Rosengart, M.D., Savannah
George W. Shannon, M.D., Columbus
Barry D. Silverman, M.D., Atlanta
Rodney L. Smith, M.D., Gainesville
Roland S. Summers, M.D., Savannah
William H. Whaley, M.D., Atlanta

Cost Awareness Committee

W. John O'Shaughnessey, Jr., M.D.

The Cost Awareness Committee has continued the efforts to make cost awareness programs available throughout the state to physicians and other interested parties. Investigation revealed that programs on cost awareness had been held in the last several years in Atlanta and other areas in North Georgia, as well as in the Albany and Valdosta regions.

The committee met by conference telephone in the summer of 1985 to discuss further areas for this type information. As a result, contacts were made with the medical societies in Athens and Augusta. However, it was impossible to work out a program since the Chamber of Commerce in both cities did not wish to participate in this type of endeavor with the local

medical societies since they were involved in other matters.

Your chairman spoke at the medical societies in Savannah and in Columbus on the subject of Cost Awareness and the utilization of "Economic Grand Rounds" as a mechanism of becoming more aware of hospital costs. Both programs were well received.

The spread of many IPA's and HMO's, including the statewide IPA/HMO of the Medical Association of Georgia, has been effective in bringing the topic of Cost Awareness to the entire state. Their efforts make it difficult to determine if the present Cost Awareness Committee activity should be continued as a separate entity from the IPA/HMO of the society.

Emergency Medical Services Committee

Rodger W. Chapman, M.D.

In response to action taken at the 1985 MAG House of Delegates, Emergency Medical Services Committee efforts for this year have been directed primarily toward the development of model protocol for handling rape victims in Georgia.

Representatives from law enforcement agencies; emergency departments/hospitals; rape crisis centers; forensic sciences; and the Metro Atlanta Crime Commission met with committee members to identify problems and review several protocols from other states and agencies. This task force agreed to pursue the following:

1. Establishment of victims' compensation funding.
2. Standardize forms for agencies involved:
 law enforcement
 medical treatment
 collection of evidence
3. Involvement of other agencies, e.g., police, sheriffs, investigation officials, judges.
4. Seek political input as advisable.
5. Seek adequate and consistent funding for rape crisis centers.
6. Develop a draft protocol using those developed in Georgia, North Carolina, Ohio, and South Carolina, and distribute it to concerned agencies, requesting their input and endorsement.

At the time of this report, draft protocols have been distributed to the concerned agencies. The task force has scheduled a meeting to review and revise these protocols. Recommendations to the appropriate agencies will be made following this meeting.

Your chairman has had the opportunity to serve on the Advisory Committee to the DHR Emergency Services Division. This agency is pursuing changes in rules/regulations and possibly legislation to enhance quality control of emergency medical services in Georgia. The subject of "Do Not Resuscitate" guidelines in out-of-hospital settings is also being discussed. We expect the MAG Emergency Medical Services Committee to have the opportunity to review any specific proposals that may develop from these activities.

Health Education Committee

S. Boyd Eaton, M.D., Chairman

Last year we defined as our top priority the passage by the Georgia General Assembly of a bill that would mandate the use of automobile safety belts. Our hoped-for legislation has unfortunately faced indifference and opposition in the General Assembly. Here is what happened.

In the 1985 legislative session, HB 38 was drafted by Representative Dick Lane. SB 76 introduced by Paul Coverdell. Both bills were basically the same in content, as each mandated the wearing of seatbelts by driver and passengers. Both bills failed to pass.

After the session, during last summer and fall, HB 38 was taken up and considered by the Motor Vehicles Committee. But in this year's House, the bill was voted down (8-5) in committee.

SB 76 never came to a vote this year in the Senate Public Safety Committee members felt it was useless to consider a bill which the House had already voted down in its version.

Nonetheless, some effort was made during the 1986 General Assembly to strengthen legislative provisions for seatbelt use. Representative Lorenzo Benn introduced HB 1321, regarding state motor vehicle emission inspection fees; this bill passed the House. In the Senate, Paul Coverdell amended the bill to include the mandatory wearing of seatbelts for children aged 4 to 11; (under the child restraint law) children up to 3 years must be in car seats. The Senate passed this amended bill.

The House and Senate then appointed a conference committee to work out differences between the two passed versions. The General Assembly adjourned on March 7 prior to both House and Senate agreeing to the conference committee's report.

* * *

In addition to the above activities, our Committee maintains strong interest in the health education curriculum of our public schools. Last July we became aware that the State Board of Education was considering the removal of health education requirements from Georgia's middle school program curriculum (specifically, the requirement mandating a minimum of 30 hours of health and nutrition instruction annually). We opposed the removal of this requirement, and with the help of Dr. Logan, MAG's President, we wrote the Chairman of the Board of Education making our opposition known. Fortunately, the expression of our opinion, and similar letters from many other organizations, persuaded the Board to make no changes on the curriculum.

* * *

I would like to close by thanking the members of our Committee on Health Education:

David F. Apple, M.D., Atlanta
Judson G. Black, M.D., Atlanta

John Davis Cantwell, M.D., Atlanta
Albert A. Carr, M.D., Augusta
J. Rhodes Haverty, M.D., Atlanta
Barry D. Silverman, M.D., Atlanta
Thomas A. Wade, Jr., M.D., Columbus
William H. Whaley, M.D., Atlanta
Mrs. Thomas A. Wade, Columbus

Impaired Physicians Committee

Edward J. Waits, M.D.

The Impaired Physicians Committee of the Medical Association of Georgia held four quarterly meetings during the last year to review the following agendas:

1. Education in the field of physician and health professional impairment in a general sense. More specifically, the latest information concerning the disease of chemical dependency (alcohol and drug dependence) among health professionals. Emphasis was placed on hospital communities setting up impairment or wellness committees that could assist in the educational process of the health care community. The committee recommended that physicians assume the role of leadership in educating other health care professionals within the individual hospital or county medical communities. Letters were sent to the individual county society officers of volunteering members of our committee to serve as educators, who would be willing to visit the local societies and present a video tape program illustrating our impaired physicians program and facilitating discussion concerning these matters.
2. Identification of impaired health professionals was the second area of study. The general problems in early identification of physician impairment was studied by the committee and recommendations made concerning ways and means that medical staffs and hospital administrators and other concerned peers could better make early identification of impaired health professionals in their areas. The availability of teams for intervention was again stressed. The Advocacy Workshop for the Impaired Physicians Program of the Medical Association of Georgia will again be offered this year to help educate the advocates on the technique and other methods in terms of early identification.
3. The concept of intervention was studied. The committee members were again warned of the effectiveness of one-to-one confrontation with the problems of physician impairment. The concept of an intervention team was emphasized and again the Advocacy Workshop was offered as a way of educating MAG members who are able to attend. The committee stands ready at all times to supply a team of a minimum of two members to visit any community statewide to offer help in interventions.
4. Lastly, the committee studied the problem of changing the Medical Directorship from the present setup to one in which the medical director's salary can be funded, so that he is not affiliated with any treatment center. This will allow the Medical Director to assume a true directorship of leadership in the field of education, identification and intervention; following which the impaired physician's care would be turned over to the appropriate treatment center. Following completion of his treatment, the Medical Director would again assume responsibility for monitoring the physician during the critical after-care period of approximately two years. This recommendation follows a similar direction taken in New Jersey, New York, Tennessee and Florida. The ways and means of funding this operation are currently being studied by the committee and will continue.



General surgeon Edward Waits, M.D., of Atlanta, Chairman of the Impaired Physicians Committee, answers questions from the Board of Directors regarding the Impaired Physicians Program.

The members to serve on the Impaired Physicians Committee this year include: Edward J. Waits, Chairman; Charles Allard, Olav H. Alvig, William H. Benson, Henry A. Brandt, Mrs. Margaret Clemens, Robert Cunningham, David B. Dennison, Thomas G. Douglass, William C. Dudney, Michael Haberman, Ralph Huie, W. Scott James, Fred Kratina, Louis O. J. Manganiello, E. M. (Mac) Molnar, Al Mooney, Thomas R. Nolan, A. Stephens Orr, Ann Marie Riether, G. Douglas Talbott, Charles R. Underwood, R. J. Van de Wetering, William Wieland, Stephen C. Wright and Asa Yancey.

Maternal & Infant Health Committee

Luella M. Klein, M.D.

The Maternal & Infant Health Committee saw some favorable results from recommendations it has previously made as reflected in the following improvements in Medicaid coverage in Georgia;

1. Pregnant women in deprived households whose income and resources do not exceed medically needy levels (January, 1985).
2. Children up to 18 in deprived households whose income and resources do not exceed medically needy levels (January, 1985).
3. Pregnant women in intact households where the principal breadwinner is unemployed and the

family's income and resources are below medically needy levels (April, 1985).

4. Children born on or after October 1, 1983 in intact households (either two parent households or relatives) whose income and resources do not exceed medically needy levels (April, 1985).
5. Pregnant women in intact households whose income and resources are below medically needy levels (October, 1985).
6. Children up to 18 in intact households whose income and resources are below medically needy levels (October, 1985).

For medical assistance only, there is a spend-down provision which basically provides Medicaid coverage if incurred medical expenses result in a family's income being reduced below the income level applied to determine eligibility for a program. A recent federal ruling does not allow a lump-sum billing at the initiation of pregnancy treatment to meet this spend-down requirement. Only bills for office visits and procedures as services are provided may be applied. Eligibility is determined through local Department of Family and Children Services.

It was also reported that the DMA is asking for several increases in its '87 FI budget, e.g., 12% physician fees, increase in funding for the EPSTD and Family Planning Programs, and funding to add body CT scans as a covered benefit.

Favorable action is also being implemented in the Georgia Public Health Department. For example:

Increasing the AFDC Standard is the Public Health Department's #1 funding priority for the '87 FY with the implementation of efforts to address the following components of a package directed toward reduction of infant mortality as its #2 priority:

—Low Birth Weight
—Prenatal Care
—Regionalization
—High Risk Program
—Neonatal Intensive Care Units
—Midwifery
Thomasville
Clayton
Waycross
Albany
—WIC Integration

The Maternal & Infant Health Committee has continued to distribute the 1985 resource document on infant mortality. Several Auxiliaries are implementing some of the recommendations contained in the document — particularly those relating to postponement of sexual involvement and education in schools.

But not all is well — obstetricians are going out of business; hospitals are closing their obstetrical services; public health departments are having difficulty obtaining physician backup; there is limited availability of nurse midwives who might be able to assist obstetricians; public health departments, departments of family & children services; and others advising indigent or Medicaid patients are feeling forced to advise patients to drop in at the nearest hospital for delivery.

Increasing malpractice issues are a major factor in this dangerous reduction of medical care. Physicians who are forced to deliver drop-ins are held legally responsible for any bad outcome of the pregnancy — complications for the mother or the baby. The committee has supported MAG tort reform efforts, but favorable legislation, even if it is enacted in 1986, will not meet the expanding needs of underserved areas and indigent patients. The committee will continue to work with other agencies to try to address these problems.

Malcolm Freeman, M.D., drafted and the Maternal & Health Committee members approved basic Guidelines for Prevention of Sexually Transmitted Diseases, including AIDS. The MAG Board of Directors (January '86) approved this document for distribution and publication in the

	Number			*Rate*		
	Total	*White*	*Black*	*Total*	*White*	*Black*
Live Births	92258	59644	31651	15.7	14.2	19.0
Age of Mother						
10-14	437	80	357	1.9	0.5	4.4
15-17	6113	2767	3338	40.7	27.9	65.3
Live Births to Unwed Mothers	23162	5024	18085	25.1	8.4	57.1
Age of Mothers						
10-14	400	45	355	91.5	56.2	99.4
15-17	4088	911	3171	66.9	32.9	95.0
Spontaneous Abortions or Stillbirths	6743	4340	2351	68.1	67.8	69.1
Age of Mother						
10-14	43	15	28	89.6	157.9	72.7
15-17	368	199	168	56.8	67.1	47.9
Induced Terminations of Pregnancy	31227	18931	11501	239.8	228.3	252.8
Age of Recipient						
10-14	402	144	254	455.8	602.5	397.5
15-17	3524	2191	1293	352.2	424.9	269.4
Birth Weight						
<1500 GM	1460	587	866	1.6	1.0	2.7
1500-2499 GM	6092	2952	3080	6.6	4.9	9.7
2500-3999 GM	75640	48674	26123	82.0	81.6	82.5
>4000 GM	9066	7431	1582	9.8	12.5	5.0
Out of Hospital Births	767	383	366	0.8	0.6	1.2
Total Deaths	46800	33493	13246	8.0	8.0	8.0
Lifestages						
Infancy (<1)	1240	605	628	13.4	10.1	19.8
Neonatal	844	406	433	9.1	6.8	13.7
Post-Neonatal	396	199	195	4.3	3.3	6.2

MAG Journal. Copies are available upon request to MAG staff.

The committee is continuing to review all maternal deaths in Georgia. In addition to review of maternal deaths, the committee is considering the feasibility of reviewing infant deaths with others who are involved in some phase of this activity. Two particular problem areas have been identified in Georgia:

Infants weighing less than 1000 Gm without congenital anomalies who die after six hours, and babies that die after discharge from the hospital.

The statistical information listed on the previous page was provided by the Georgia Department of Human Resources, Vital Statistics Department:

Medical Aspects of Sports Committee

Letha Y. Hunter, M.D.

The Medical Aspects of Sports Committee produced its second annual *MAG Sports Medicine Newsletter* in September 1985. As in 1984, the *Newsletter* contained articles on a variety of subjects pertinent to the prevention and treatment of sports injuries. The articles, written by the committee members, are geared for high school coaches and trainers. Copies were distributed to all high school coaches in Georgia.

The *Newsletter* continues to be well received by the coaches. The Committee plans to continue publication in the year 1986-87. Funds to do so have been requested in the FY 87 budget.

Medical Schools Committee

William C. Waters, III, M.D., Chairman

Last year, as I reported to the House in my report, our Medical Schools Committee proposed to hold an invitational conference to bring practicing physicians together with academic physicians, and discuss educational issues of common concern.

I am pleased to report that our meeting — MAG's Eleventh Biennial Conference on Medical Education — seemed fruitful.

Held last October 18-19 (Friday afternoon and Saturday morning) at the University of Georgia Continuing Education Center in Athens, our meeting was attended by nearly three dozen guests; including deans and faculty from the medical schools at Emory, the Medical College of Georgia, Mercer and Morehouse; MAG officers; members of our Medical Schools Committee; directors of residency programs in Georgia; representatives of the Composite State Board of Medical Examiners, etc.

The agenda featured the important subjects of medical manpower in Georgia, the professional liability crisis, foreign medical schools, residencies and cost containment. Our discussions led to agreements on several important points, which our Medical Schools Committee framed as recommendations:

1) the MAG should encourage the Composite State Board to work with other sources of information (e.g., Mr. Douglas Bachtel of the Georgia Rural Extension Services) to compile accurate and up-to-date data on the distribution of health care personnel, including numbers and kinds of physicians located throughout the state.
 From the start, our discussions of medical manpower were hampered by a lack of confidence in the available data on distribution of physicians (e.g., AMA statistics). We quickly concluded that Georgians need a central source of accurage data on the distribution of physicians related to medical service areas.
2) the MAG should voice its concern as to the quality of medical care being delivered by certain physicians, frequently foreign medical graduates holding temporary licenses. In such cases, the MAG should cooperate with the Composite State Board of Medical Examiners to ensure that these temporary licenses are not extended or made permanent.
3) the MAG should cooperate with our medical schools in educating the public regarding the liability insurance crisis and the need for legislative reform, as well as on the limitations of today's medical care and what patients may reasonably expect from the practice of medicine.
 This recommendation reflects the consensus — a breakthrough in agreement — among our attendees that the MAG and the state's medical schools should work together on these and other areas of common concern.
4) the MAG, in cooperation with the Georgia Hospital Association, should urge all hospitals in the state, especially teaching hospitals, to append a statement of costs to every patient's medical chart, as a means of educating physicians on cost containment.
5) the MAG, working with our state's medical schools and residency programs, should form a joint panel to develop guidelines regarding the use of health care resources in extraordinary circumstances (e.g., oncology, renal transplant).

Our Committee brought these recommendations to the MAG Board of Directors last February. The first four were accepted; the fifth was referred to the MAG Medicine and Human Values Committee, which is examining the use of health care resources in complex medical ethical situations.

On our most pressing recommendation — the need for a central source of accurate, state-wide information on distribution of physicians — we can already report progress. MAG has written Governor Harris expressing our concerns for this central data source. As a result, we have been informed that funding has been provided to get the project underway. State government computer resources have been allocated, and an all-Georgia physician survey is being developed to establish the data base.

As in every instance when our Association achieves good results, we owe our thanks to the physicians who give their time and efforts to MAG. In our case I wish to acknowledge the help provided by MAG staff member Steve Davis, and would especially like to thank the members of my Committee:

S. William Clark, III, M.D., Waycross
Lois T. Ellison, M.D., Augusta
Frank L. Ferrier, M.D., Atlanta
Harold L. McPheeters, M.D., Atlanta
James S. Maughon, M.D., Atlanta
George W. Shannon, M.D., Columbus
H. Kenneth Walker, M.D., Atlanta
K. Kramer, M.D., Augusta
Earl Mullis, Macon

Membership Committee

Ralph A. Tillman, M.D. Chairman

The MAG Membership Committee did not meet this year.

However, 1,103 new members joined MAG from January 1985 through February 1986.

MAG has 6,154 members not including students and residents. There are approximately 8,200 practicing physicians in Georgia. In the upcoming year the MAG Membership Committee will develop and implement strategies planning to encourage these approximately 2,000 nonmembers as well as additional residents and students to join MAG.

Membership Insurance Committee

Ken Goldman, M.D., Chairman

This year Risk Management Seminars were expanded to include specialty specific programs. These programs were developed under the guidance of J. Rhodes Haverty, M.D., and twelve individual specialty societies. MAG Mutual and St. Paul provided technical assistance and speakers. Total registration for Level I and Level II seminars exceeded 1,200 physicians during 1986. In comparison some 400 physicians attended programs during the previous year.

Next year we may see significant changes in the content of our Risk Management program. St. Paul in December 1985 stopped offering premium discounts to attendees. Your Membership Insurance Committee will work closely with MAG Mutual and St. Paul to insure the effectiveness of risk management courses in the future.

Another function of the Membership Insurance Committee is to approve insurance plans for MAG's membership. Currently three plans are approved — disability insurance through Insurance Specialists, Inc. in Atlanta and National Life of Vermont; and the Southern Medical Association Insurance Program offering life, health and disability insurance.

The disability program through Insurance Specialists has been available for over ten years. Approximately 600 MAG members have disability coverage under this plan.

The disability plan through National Life of Vermont was first offered to the membership in September 1985. One of the essential elements of this plan is that it will cover physicians in higher risk categories. Since National Life covers physicians with higher risk, they require 50 "standard" risk physicians to sign before opening the plan. To date National Life has commitments from approximately 45 of the required 50 enrollees.

The insurance program offered by the Southern Medical Association includes nine basic plans designed for physicians, their families and employees — term life insurance; accidental death and dismemberment; major hospital; major medical; long term disability; short-time disability; hospital indemnity; office overhead exposure disability and survivor annuity income. To enroll in this plan a physician must be a member of SMA (annual dues $75). Currently SMA has some 15,000 physicians enrolled in the plan nationwide and over 2,000 from Georgia.

During the next year the Membership Insurance Committee will continue to monitor insurance offerings for quality and competitiveness. Additionally, the Committee will work to maintain effective risk management programs.

Non-Physician Health Care Providers Committee

Richard W. Cohen, M.D.

During this past year, the Non-Physician Health Care Providers Committee has had the opportunity to consider a variety of activities that have or will have impact not only on physician relationships with non-physician health care providers, but ultimately on their relationships with their patients. In order to emphasize the scope of these activities, the committee submits the following subject summaries:

Georgia's Attorney General 8/5/85 Ruling Re Physician Delegation:

The current Georgia Medical Practice Act [(43-34-26 (b) (9)], which outlines acts constituting the practice of medicine, provides the following exception:

"(b) Nothing in this chapter shall be construed to prohibit:
(9) The utilization of a physician's assistant to perform tasks approved by the board, and the performance of such tasks by the physician's assistant; *the delegation by a physician to a qualified person other than a physician's assistant of any acts, duties, or functions which are otherwise permitted by law or established by custom; and the performance of such acts, duties, or functions by such a person other than a physician's assistant.*" (emphasis supplied)

On August 5, 1985, the Georgia Attorney General expressed his offi-

cial opinion that this law "does not authorize a physician to delegate tasks to unlicensed personnel, when the performance of such tasks would otherwise require a license in an established category of health care."

According to MAG legal counsel, this opinion requires, in effect, that a physician continually assure that his auxiliary personnel — whether or not they hold a license in some subcategory of health care — do not operate within the exclusive ambit of another subcategory for which they are not licensed. Obviously, the more non-physician health care providers that secure licensure status, the more complicated and limited the physician's authority to delegate becomes. The MAG Board of Directors approved general delegation language (Texas law) to be used within the Georgia legislative process if indicated. The Non-Physician Health Care Providers Committee concurred with this decision and further recommended that legislation to assure the physician authority to delegate will be pursued.

Pharmacies:

Subjects addressed include four national and local movements which directly affect the practice of medicine:

A. Sample Drugs

The National Association of Boards of Pharmacy and a statement from the Georgia Board of Pharmacy are proposing that all drug samples be discontinued.

The committee did not support such a broad ban but was sympathetic to a restriction of the sampling of narcotic and addictive drugs.

B. Therapeutic Substitution

After review of sample legislation authorizing therapeutically equivalent substitution by pharmacists, the committee recommended that MAG oppose any such proposed legislation in Georgia. Physicians must retain their flexibility and authority in treating each individual patient. Therapeutic substitution is fraught with potentially unacceptable and uncertain complications.

C. Pharmacists' Prescribing Privileges

The committee considered an article from the July 15, 1985 issue of *Drug Topics* describing legislation that grants pharmacists prescribing privileges — effective October 1, 1985, Florida law grants pharmacists authority to "evaluate" a patient, "order" and dispense drugs within five categories. In California, pharmacists may prescribe drugs in an institutional setting, and in Washington State they develop protocols with physicians.

The committee recommended that MAG oppose any attempts to allow pharmacists to evaluate patients and/or prescribe medications.

Allied Health Practitioners:

The committee reviewed examples of legislation that has been passed in other states relating to regulation of allied health practitioners generally. They reflect two different mechanisms: A. regulations of the health professionals such as the Nebraska and Washington laws and B. limitation of examining and licensing boards such as laws in North Carolina and Minnesota.

The committee recommended that MAG oppose any legislative or regulatory attempt that would decrease the authority of a physician to delegate responsibilities to qualified people and to oppose current efforts (through 1986 Georgia General Assembly) of any non-physician health care provider to obtain certification or licensure as an independent practitioner.

The 1986 Georgia General Assembly passed legislation that will establish a Georgia Occupational Regulation Review Commission to review proposals to create new licensure boards. It provides in part that:

"All bills introduced in the General Assembly newly regulating a profession or business should be reviewed according to the following criteria and, in evaluating whether a profession or business shall hereafter be regulated, the following factors shall be considered:

(1) Whether the unregulated practice of an occupation may harm or endanger the health, safety, or welfare of citizens of this state and whether the potential for harm is recognizable and not remote;

(2) Whether the practice of an occupation requires specialized skill or training and whether the public needs and will benefit by assurances of initial and continuing occupational ability;

(3) Whether the citizens of this state are or may be effectively protected by other means; and

(4) Whether the overall cost-effectiveness and economic impact would be positive for citizens of this state."

No bill will be considered by the Georgia General Assembly until this review is completed. We will monitor the implementation of the legislation.

Georgia Legislation Relating to Non-Physician Health Care Providers:

In addition to the above, the committee reviewed proposed Georgia legislation relating to chiropractors; applied psychologists; clinical laboratory science practitioners; physical therapists; x-ray technicians; respiratory therapists; social workers; nonmedical health care, defined as "specialties of food science and mechanotherapy"; midwives; and third party reimbursement to nurses.

The MAG Joint Practice Committee, reestablished in 1985 as a subcommittee of the Non-Physician Health Care Providers Committee, met twice to discuss the issue of third party reimbursement for nursing services. No general agreement on this subject was reached by the Joint Practice Committee.

The 1985 Georgia General Assembly passed a resolution directing the Senate Committee on Insurance to study this issue. This committee held a number of public hearings throughout the state. A bill (SB 381) was presented to the 1986 Georgia General Assembly that would mandate reimbursement of nurses by all health and accident insurance policies or health care corporations which provide coverage for services within the lawful scope of practice for RNs. This

bill was placed in a House Study Committee.

Fragmentation of Medical Practice:

Committee members expressed growing concern about the fragmentation of medical practice that is, and will continue to be, the result of the increasing number of non-physician providers; their expanding scopes of practice; and the resulting limitations to the physician's authority to delegate tasks. It was pointed out that the bottom line in all non-physician health care provider efforts to increase their scope of practice, to establish their independence by separate licensure, or to be independently paid by third party payers is money. Physicians are more and more limited in what they can do to preserve the practice of medicine in face of the restraint of trade issues that arise when concerted action is taken to limit the practice of medicine to physicians. The committee feels that physicians *must* serve as their patients' advocates before the situation is such that there are so many providers "certified or licensed" to do so many overlapping things, the public will have no way of knowing which, if any, of the providers is qualified to identify and meet their medical needs.

"A Study of Health Manpower in Georgia":

(Written by J. Stephen Wright, Adam Jablonowski, Karen Butler, Evangeline Hebbeler, and Jody Hunter, and published and distributed by the Georgia Joint Board of Family Practice.)

This publication includes the practice definition and distribution (per licensure data) of the following professions: Chiropractors, Dentists, Occupational Therapists, Opticians, Optometrists, Pharmacists, Physical Therapists, Physician Assistants, Physicians, Podiatrists, Psychologists, Registered Nurses, and Speech Pathologists/Audiologists.

Information from this publication including definition of terms, numbers and distribution of each of the above named professions is available upon request to MAG Headquarters.

Your committee has no formal recommendations for the 1986 House of Delegates. It would like the foregoing to be used for information purposes by the House of Delegates and the membership of MAG.

We look forward to continued productivity in the coming year.

Occupational Health Committee

James E. Averett, Jr., M.D.

The Occupational Health Committee did not meet last year.

Physician/Lawyer Liaison Committee

James A. Kaufmann, M.D., Chairman

Principles Governing Physician-Attorney Relations

For several years the Physician-Lawyer Liaison Committee has conducted discussions with committees of the State Bar of Georgia regarding the revisions to the *Principles Governing Physician-Attorney Relations*. These *Principles*, originally adopted by MAG and the Bar in 1969, set forth understandings between the two associations regarding all aspects of relations between physicians and attorneys.

A re-writing of the *Principles* was necessitated by new statutes and Supreme Court decisions relating to release of medical records. It was also desirable to alter the provisions relating to notice for subpoenas and to make general editorial changes.

Discussions with representatives of the Bar were protracted, but after numerous meetings agreement was finally reached by the Physician-Lawyer Liaison Committee and its counterpart committee of the Bar.

After many years of trying, the MAG and the State Bar of Georgia have agreed upon a set of *Principles* governing the relationship between lawyers and medical doctors. We consider this a great accomplishment. The MAG Board of Directors approved the revised *Principles* in June 1984. The State Bar's Board of Governors gave its approval in December 1985. The task is therefore complete and the Physician-Lawyer Liaison Committee has requested funds in the FY 1986-87 budget to pay for MAG's share of the printing and distribution of the new *Principles* to MAG's members.

Annual Meeting

Historically, the Physician-Lawyer Liaison Committee has held an annual meeting in the fall, usually with members of the State Bar of Georgia, to study and discuss medico-legal issues. This year's meeting was held December 4, 1985 in Macon, and focused on MAG's tort reform legislative initiative.

This year's meeting was attended by business leaders and members of the Georgia General Assembly, in addition to physicians. Featured speakers included Johnnie L. Caldwell, former Commissioner of Insurance of the State of Georgia, and Richard Corlan, M.D., Speaker of the House of Delegates of the California Medical Association who spearheaded the tort reform efforts in that state. Charles Hollis, M.D., gave the perspective of MAG Mutual on the problem, and Mr. Ron Dean, Vice President for Personnel Affairs of Georgia Kraft Company, gave the employer's perspective on the problem.

Prison Health Care Committee

Robert H. DeJarnette, Jr., M.D.

The Committee on Prison Health Care met four times during the fiscal year 1985-86. Dr. Robert DeJarnette, Jr., Vidalia, continues to serve as Chairman of this committee.

Funding for the activities of the Jail Health Care Program which is directed by this committee was obtained from the Georgia Department of Corrections in the amount of

$42,832.00 for the state fiscal year beginning July 1, 1985 and ending June 30, 1986. This was an increase of 6% over the last year and a 4% to 6% increase will be expected in the next fiscal year. Other committee income has been received through accreditation fees and this has partially funded the services of physician members of the committee, who conduct accreditation site visits, and also covered their expenses associated with these visits.

MAG staff person assigned to this committee is Dorothy Parker, who also conducts the Jail Health Care Program, with secretarial assistance provided at MAG at 25% time and paid for by this budget.

The Accreditation Program grew substantially during this past year with the accreditation of several very large state prisons. County jails also continue to come into the program and all are continuing to renew their accreditations. The program now includes 28 accredited facilities including both jails and prisons in Georgia with eight of these being added since the last report.

Prison facilities being added for the first time this year are the three large men's facilities at Hardwick: Rivers Correctional Institute, Youthful Offenders Correctional Institute, and Men's Correctional Institute. Rogers Correctional Institute at Reidsville was added when Georgia State Prison renewed its accreditation. The Georgia Diagnostic & Classification Center at Jackson, Georgia was accredited for the first time this year. This facility houses about 1,600 inmates. The three facilities at Hardwick houses over 3,000 inmates. These are certainly some very outstanding achievements for these facilities.

When the Accreditation Certificates were presented by Charles Meyer, Jr., M.D., committee member, in Milledgeville in September, Commissioner David Evans of the Department of Corrections made a special tribute to the Medical Association of Georgia and the Jail Health Care Program for continuing to make these services available to the State of Georgia. The Women's Correctional Institute at Hardwick subsequently proceeded through the National Commission on Correctional Health Care Accreditation and their earlier accreditation by MAG was reaffirmed, thus making them the first women's prison to become accredited in this country. Another outstanding achievement was when the longstanding court orders and court monitoring was ended for Georgia State Prison at Reidsville during 1985. The ability of this facility to maintain accreditation status was an important factor in the consideration of the ending of the Guthrie suit.

New county jail facilities became accredited last year: Chattooga County Jail in Summerville; Randolph County Jail in Cuthbert; and Taylor County Jail in Butler. These facilities were accredited for one year for meeting AMA Standards for Jail Health Care. Other jails continuing accreditation during the past year were: Monroe County Jail in Forsyth; Cobb County Jail in Marietta; Richmond County Jail in Augusta; Douglas County Jail in Douglasville; Gordon County Jail in Calhoun; and Newton County Jail in Covington. The Sumter County Jail in Americus proceeded through the accreditation process in August of 1986, but failed to meet enough of the standards for reaccreditation. They were placed on probation and are indicating they wish to go through the accreditation process again.

The Atlanta City Prison made a special request for an accreditation site visit last summer which was completed with Drs. Hopkins and Newkirk of this committee assisting. This facility was also not meeting a sufficient number of standards and the MAG Committee on Prison Health Care made a number of recommendations to assist this facility in their attempt to comply with the standards. They were continuing to implement recommendations at our last communication.

The Technical Assistance Program is continuing and it is expected that two new facilities will be processed for accreditation shortly. It is also expected that the Department of Corrections will request first-time accreditation site visits for some of their facilities still not accredited.

In November, the MAG Committee on Prison Health Care cosponsored with the Georgia Chapter of the American Correctional Health Services Association a symposiuim at Jekyll Island. The attendance at this program was 92, with about 50% physicians, the rest being nurses, physician's assistants, and dentists. Some major topics at the symposium were discussions of AIDS in prisons and pharmacy procedures. This occasion was also used for the presentation of several Accreditation Certificates, with Wardens Lanson Newsome and Calvin Green from Georgia State Prison and Rogers Correctional Institute at Reidsville, making a special appearance to receive these certificates which were presented by Dr. DeJarnette, Chairman of this committee. Both CME and nursing credits were offered at this conference.

Physician membership on this committee remains quite stable with resignations only from Louis Chelton, M.D., and Arturo Riego, M.D. However, two new physicians were added to the committee: Herman Spivey, M.D., of Summerville, who is the physician at the Chattooga County Jail, and John H. Reed, Jr., M.D. of Gainesville, who requested membership on the committee. Physician members of this committee do remain quite active in conducting site visits which is an extensive activity. This active participation by these physicians has certainly been a fine contribution of medical services to Georgia and is, without doubt, a fine example of physician dedication and commitment to this particular area of medicine. The practice of medicine in Georgia prisons and jails is beginning to achieve a much deserved recognition. Perhaps one of the best examples of this recognition, in addition to the commendation by David Evans, GDC Commissioner, is the development of the inauguration of a new fellowship program in correctional medicine and prison health at the Morehouse School of Medicine, which was just announced in January,

1986 by Daniel Blumenthal, M.D., Professor and Chairman of the Department of Community Medicine and Family Practice at Morehouse. Although the committee did not achieve this directly, it is certainly responsible for creating a climate in which something like this could happen.

This committee appreciates the valuable support given by the members of the Medical Association of Georgia and respectfully submits this report as information on the progress and growth experience during the past year.

Scientific Assembly Committee

Roland S. Summers, M.D., Chairman

The 1985 MAG Scientific Assembly, our eleventh annual multispecialty CME meeting, was held last November 22-24 at the Ritz-Carlton Buckhead Hotel. By all accounts the conference was a successful one, one of our strongest ever.

Attendance: Our registration figure of 778 represents our biggest attendance since 1981, when we had fifteen specialty programs (in our recent meeting we had just twelve). Of this 778, fully 735 attendees were physicians — another 43 registrants were residents, medical students, allied health professionals, or guests.

We attribute this superb attendance to three factors. First, our participating specialty societies arranged exceptionally strong educational programs, with top-flight speakers and topics chosen by the respective society program chairmen. Here is our attendance by specialty:

Allergy and Immunology	54
Chest Disease	85
Emergency Medicine	35
Gastroenterology	47
Neurology	30
Neurosurgery	55
Ob-Gyn	87
Ophthalmology	101
Otolaryngology	23
Pathology	109
Plastic Surgery	45
Psychiatry	102
Not specified	5
	778

Second, our meeting site definitely helped our attendance. For the second year, MAG held its Scientific Assembly at the Ritz-Carlton Buckhead Hotel. True to its outstanding reputation, the Ritz offered our meeting very fine guest rooms and meeting accomodations, at a very reasonable price. Moreover, our location, in "uptown" Atlanta, across from Lenox Square and Phipps Plaza, was a real attraction to our out-of-town attendees. Almost everyone, in short, liked the hotel; as a result, we have booked it for our next meeting.

A third factor in our strong showing last November was that during our Scientific Assembly weekend, three state specialty societies held Risk Management "Type II" Seminars at the Ritz-Carlton: Georgia Neurosurgical Society; the Georgia Chapter, American College of Surgeons; and the Georgia Society of Internal Medicine. These meetings drew some 250 physicians to the hotel, a number of which registered for the Scientific Assembly in addition to their risk management seminar.

Program Chairmen: The MAG Scientific Assembly relies on the participation and support of our state's medical specialty societies. For our success last fall we owe a great deal of thanks to the following physicians who arranged scientific programs for their specialties:

Gary Z. Lotner, M.D., Marietta
Allergy & Immunology Society of Georgia

Paul Scheinberg, M.D., Atlanta
Georgia Thoracic Society

Eric G. Honig, M.D., Atlanta
Georgia Chapter, American College of Chest Physicians

Gail V. Anderson, M.D., Atlanta
Georgia Chapter, American College of Emergency Physicians

Theodore Hersh, M.D., Atlanta
Georgia Gastroenterologic Society

Mark A. Kozinn, M.D., East Point
Georgia Neurological Society

Herman F. Flanigin, M.D., Augusta
Georgia Neurosurgical Society

Donald Sherline, M.D., Augusta
Georgia Ob-Gyn Society

William H. Jarrett, M.D., Atlanta
Georgia Society of Ophthalmology

William E. Silver, M.D., Atlanta
Albert A. Clairmont, M.D., Atlanta
Georgia Society of Otolaryngology/ Head and Neck Surgery

E. Capers Palmer, Jr., M.D., LaGrange
Georgia Association of Pathologists

William R. Anderson, M.D., Gainesville
Atlanta Society of Pathologists

W. Jefferson Pendergrast, M.D., Atlanta
Georgia Society of Plastic Surgery

Gail F. Anderson, M.D., Atlanta
Georgia Psychiatric Association

Finances: $39,346.76 was spent on the 1985 Scientific Assembly. Our expenditures are listed below:

Ritz-Carlton Hotel	$ 7,799.77
Specialty Society Reimbursements (speakers' costs & honoraria)	$16,500.00
Publicity (printing & postage)	$ 7,190.49
Audio-Visual (equipment & projectionists)	$ 4,657.08
Other administrative costs	$ 3,199.42

For the first time ever, the MAG Scientific Assembly took in more money than we paid out:

Income:

Registration fees	$43,622.00
Pharmaceutical contributions for Residents' luncheon	450.00
	$44,072.00

Net increase of revenue over expenses: $4,725.24

The financial success of our meeting was due in large part to the decision, made last year by the MAG Finance Committee and approved by the Board of Directors, to increase our Scientific Assembly registration fees. This increase — from $50 to $75 for MAG members, and from $75 to $100 for non-member physicians — has proven to be a very sound decision. The fee increase certainly did not deter attendance. Rather, our success this year suggests once again that the MAG Scientific Assembly is a very worthwhile and very reasonably priced educational activity for our membership.

Plans for this fall: Every four years

the Southern Medical Association holds its Annual Scientific Assembly in Atlanta, during the first weeks of November. On these occasions, because the SMA's meeting time is so close to ours, the MAG has developed the practice of cosponsoring the Southern Medical event.

This year, the SMA's Scientific Assembly will once again be held in Atlanta, at the World Congress Center, November 8-11. Instead of holding a separate scientific meeting, the MAG — as in 1978 and '82 — will coordinate its efforts in support of the SMA Scientific Assembly. All Georgia physicians are invited to attend.

As always, I wish to thank the members of the Scientific Assembly Committee, who have guided our meeting and helped to maintain its strength as a worthwhile CME activity for physicians in Georgia:

Edwin C. Evans, M.D., Atlanta
John A. Harrel, Jr., M.D., Decatur
Ellis B. Keener, M.D., Gainesville
Arthur J. Merrill, Jr., M.D., Atlanta
Carter Smith, Jr., M.D., Atlanta

Committee on Specialty Society Relations

Ellis B. Keener, M.D., Chairman

The Committee on Specialty Society Relations has met only once during the past year but it remains nonetheless, the essential connecting link between the Medical Association of Georgia and all of the recognized state-level Specialty Societies in Georgia.

The charge given to the Specialty Society Relations Committee which states that "The committee shall maintain communication between MAG and the Specialty Societies" has been broadly interpreted by the committee to suggest that at least one of their functions is to serve as a distribution agent for socio-economic information of interest to the Specialties that comprise the committee.

On that note the committee met last summer to give the Specialty Society representatives a preview of the newly developed MAG Statewide HMO/IPA. The presentation emphasized: (1) the reasons MAG felt it had to organize an alternate delivery system for the benefit of its members; (2) the goals and objectives of the HMO/IPA; (3) the scope and function of this organization; (4) an explanation of the organizational complexity of the HMO/IPA set up; and (5) how the organization would be capitalized.

At the same meeting the representatives of the Specialty Societies were given a report on the development of the Blue Cross/Blue Shield alternative delivery systems — specifically their Preferred Provider Organization (VIP) and their efforts, as of that date, to set up a Statewide HMO/IPA.

An extensive question and answer session followed the MAG HMO presentation and the Blue Cross/Blue Shield presentation and the Specialty Society representatives left the meeting with a reasonably good understanding of how these two newly emerging delivery systems would be organized and how they would function.

The Committee on Specialty Society Relations is the first point of contact for a specialty society seeking recognition by MAG. In this regard the Georgia Society for Gastrointestinal Endoscopy presented a request for membership on the Specialty Society Relations Committee. Protocol on such matters call for a final decision to admit or not to admit to membership to be made by the MAG Board of Directors — usually based on (or at least influenced by) a recommendation by the Specialty Society Relations Committee. In this instance the committee felt that a large part of the Endoscopy Society membership was represented on the committee through other specialties (cross over membership) and accordingly recommended to the MAG Board that membership of the Specialty Society Relations Committee not be expanded to include a representative of the Georgia Society for Gastrointestinal Endoscopy at that time. The door was left open for later consideration of this request if circumstances warrant.

The changes in medical practice which have accelerated over the past several years in response to increased pressures, first from government, then insurance carriers and now from business and industry corporations are conspiring to change the face of how medicine will organize to respond to those pressures and those challenges.

It is apparent that one of the changes resulting from these pressures is the emergence of more active, more concerned, more involved but, unfortunately, more parochial specialty societies with views drawn more narrowly for their own self defense.

It behooves MAG to recognize this evolutionary change in the interest and concerns of specialty societies and thus position itself to serve them better in the hope of keeping all of organized medicine under the big umbrella of the State Medical Association.

I want to thank the representatives of the Specialty Societies for their participation on the committee and for their continued service to MAG.

Third Party Payors Committee

C. Peter Lampros, M.D.

The Third Party Payors Committee met once in the year 1985-86 and considered several matters which were referred to it or which were brought up on the Committee's own initiative.

Pre-Admission Certification

The 1985 House of Delegates passed a resolution calling for a study of pre-admission certification programs and their impact on the physician's practice. The AMA, in the meantime, continued its on-going studies in this area and adopted a report at its December 1985 meeting. The Committee has considered this report and believes that it provides excellent information on pre-admission certification. The Committee offers this in lieu of its own study, with the following commentary.

1. Subsection (a) on Page 5 of the AMA report reads as follows:

 (a) Blanket pre-admission review of all or the majority of hospital admissions does not necessarily improve the quality of care, and should not be mandated by government, other payors or hospitals.

The Committee does not agree with this principle as stated. Pre-admission certification does not simply provide a "yes" or "no" answer, but is a tool used to monitor length of stay and to aid in discharge planning. To say that "blanket pre-admission review" does not "necessarily" improve quality is to overlook a significant value which it does have. Furthermore, stating that pre-admission certification should not be mandated by payors is unrealistic in today's medical market.

2. The Committee wishes to stress the importance of greater standardization of pre-admission certification programs, and also believes that such programs should be targeted toward areas of abuse.

Other Committee Activities:

The Committee also considered issues relating to: home health care; hospitals' billing practices; and obstacles to recycling re-usable orthopaedic equipment. The Committee made recommendations on these matters to the Executive Committee and the Board of Directors.

Trustee Advisory Committee

Cyler D. Garner, M.D.

Last year we reported that the MAG Retirement Plan would be converted to a money purchase pension plan. This conversion had the dual effect of benefitting our employees while limiting MAG's financial liability should investment earnings not meet expectations.

As a side benefit of this conversion, MAG received a "payback" from prior year contributions of $60,000. This return is sufficient to fund MAG's current year obligation of 8% of eligible employee's salaries.

Ad Hoc Committee on Liaison with GOMA

Alexander H. S. Weaver, M.D.

As a result of 1985 MAG House of Delegates action, this committee was appointed and charged "to establish communication in all matters between the MAG and GOMA, and that such liaision structure be recommended to county medical societies with their appropriate osteopathic component society, provided GOMA reciprocates with a liaison structure." The GOMA appointed an equal number of representatives and this committee met September 25, 1985. At this initial meeting, the committee agreed to discuss MAG's priority programs — the IPA/HMO and tort reform.

IPA/HMO:

General information was made available to GOMA representatives through copies of the proceedings of the October '84 called meeting of the MAG House of Delegates and the July 1, 1985 memo to MAG members regarding participating in the MAG IPA/HMO. Mr. Fowler reported that the steering committee in charge of the development of the HMO had recently voted to allow osteopathic physicians to join if they are members of the GOMA at the going rate plus a $500 surcharge.

Tort Reform:

Attendees were provided information in an August 12, 1985 letter to MAG members. Basically, the plan is to pursue the following package as one omnibus piece of legislation:

1. $250,000 limitation on non-economic loss
2. Disclosure of collateral sources on payment to plaintiffs
3. Require structured settlements for large awards
4. Change the Statute of Limitations for minors to age 6 plus 2 years
5. Judicial authority to modify jury awards
6. Limitations on contingency fees
7. Mandatory review by Medical Board of any physician whose settlement or award exceeds $100,000

The difficulty in passing such legislation was emphasized. The committee expressed the desire to have GOMA work with the MAG in this major undertaking in Georgia, especially in educating patients as to how access to and cost of medical care is being adversely affected by the malpractice crisis. The GOMA representatives expressed support for this project.

Osteopathic Membership in MAG:

Three of the osteopathic physicians expressed a desire to join their respective county medical societies, but not necessarily the MAG. The MDs in county medical societies are the people they associate closely with both professionally and socially. MAG has unified membership i.e., to join the county society, one also must join the MAG. The committee questioned whether physicians would be interested in maintaining full membership in both GOMA and MAG. It was suggested that GOMA members be granted Associate Membership, but no decision was made to pursue this at this time.

Ad Hoc Committee on the Implementation of the IPA/HMO

S. William Clark, Jr., M.D., Chairman

Since its formation following the 1985 House of Delegates, the Ad Hoc Committee has carried out its charge and has implemented MAG's IPA/HMO.

The task of forming this organization was a complex and difficult one. The full Committee met on four occasions and its Steering Committee met four additional times. The Committee considered and addressed the

various issues associated with incorporation, licensing, physician and hospital contracts, operational features, capitalization, staffing, and many other aspects of implementation. In addition, individual committee members and staff spent many days and nights visiting component medical societies to present the plan to MAG members and to encourage their participation.

The formation of the Georgia Health Network is an accomplishment of which every MAG member should be proud. Highlights of the year's work include:

—Over 2,500 MAG members agreed to contract with the Georgia Health Network to provide physician services.
—The subsidiary corporations of MAG which constitute the Georgia Health Network were formed in accordance with the direction of the 1985 House of Delegates. These four corporations were chartered in December 1985.
—Stock was sold in one of the subsidiary corporations. The prospectus was mailed in November 1985 to all MAG members, who purchased $1,060,000 in stock. The offering was closed January 10, 1986.
—The State Insurance Commissioner issued a license to Georgia Health Network on January 31, 1986. Because of the strong support from MAG members, the license was granted in record time and contained approval for statewide operation.
—The Boards of Directors of all the subsidiary corporations have been selected. The Boards are entirely composed of physicians, except for the four "public" members of the Insurance Company Boards. These public members are Sam Ayoub, John Prince, Peter Knox, and Herbert Mabry.
—The Executive Director, David Poythress and the division heads have been hired.

I wish to express my appreciation to all the members of the Implementation Committee for their hard work and dedication:

Steering Committee:

William D. Logan, Jr., Atlanta
John D. Watson, Jr., Columbus
F. William Dowda, Atlanta
William B. Jones, Gainesville
Joseph P. Bailey, Augusta
Richard W. Cohen, Austell
Cyler D. Garner, Gordon

LaMar S. McGinnis, Decatur
H. Dwight Cavanagh, Atlanta
James F. Beattie, Fort Oglethorpe
Dan B. Stephens, Marietta
Lanny R. Copeland, Moultrie
Teresa B. Clark, Atlanta
Stephen Boyle, Conyers
William W. Moore, Jr., Atlanta
William C. Collins, Atlanta
Sam O. Atkins, Atlanta
A. D. Muse, Athens
Joseph M. Turner, Tifton
James A. Kaufmann, Atlanta
Bannester L. Harbin, Jr., Rome
Kenneth C. Henderson, Macon
William J. Laws, Brunswick
Garnett J. Giesler, Jr., LaGrange
John B. Rabun, Savannah
Paul L. Dickson, Augusta

Ad Hoc Committee on Medicaid Payments To Public Health Clinics

Cyler D. Garner, Chairman

In the 1985 legislative session, the state budget reduced the state's appropriation for public health clinics and authorized the clinics to make up the shortfall by becoming Medicaid providers. This had the effect of saving the state money because Medicaid funds are approximately one-half federal monies.

The Ad Hoc Committee presented its views to the Department of Medical Assistance and expressed its reservations about the program designed to reimburse public health clinics with Medicaid funds. The Ad Hoc Committee also expressed to the Department of Medical Assistance the view of MAG that, if such a program were instituted, the scope of the program should be limited. The Ad Hoc Committee was also successful in getting DMA to appoint a special advisory committee to monitor the program.

However, after all the preparation by DHR and DMA, it has now been determined that public health clinics are not eligible for Medicaid reimbursement under the federal guidelines. The funds removed from the 1985-86 budget were put back in the supplemental budget enacted in the 1986 session. The entire issue is now moot. Therefore, at its March meeting, the Executive Committee abolished the Ad Hoc Committee of Medicaid Payments to Public Health Clinics.

Ad Hoc Committee on Radiology Technologists

John D. Watson, Jr., M.D.

During the past several years there have been a number of activities occurring in the field of radiation protection for the patient. This has included a move at the federal level to legislate mandatory training and/or licensure of anyone operating equipment that delivers ionizing radiation. The main impetus of the local and national organizations of Radiology Technologists has been to seek licensure status.

Two years ago (1983) the Randolph Bill was attached to some federal appropriations bill and passed. This law basically gave states three years to come up with some type of control or potentially face federal mandate. Ongoing negotiations with the Technologists in Georgia have led to general agreement to accept certification by the Composite State Board of Medical Examiners in lieu of licensure, and that a two-tier level of training will be required. There was also general agreement that it would be better to proceed with state legislation in 1986 than try to deal with probable federal legislation in 1987 or beyond.

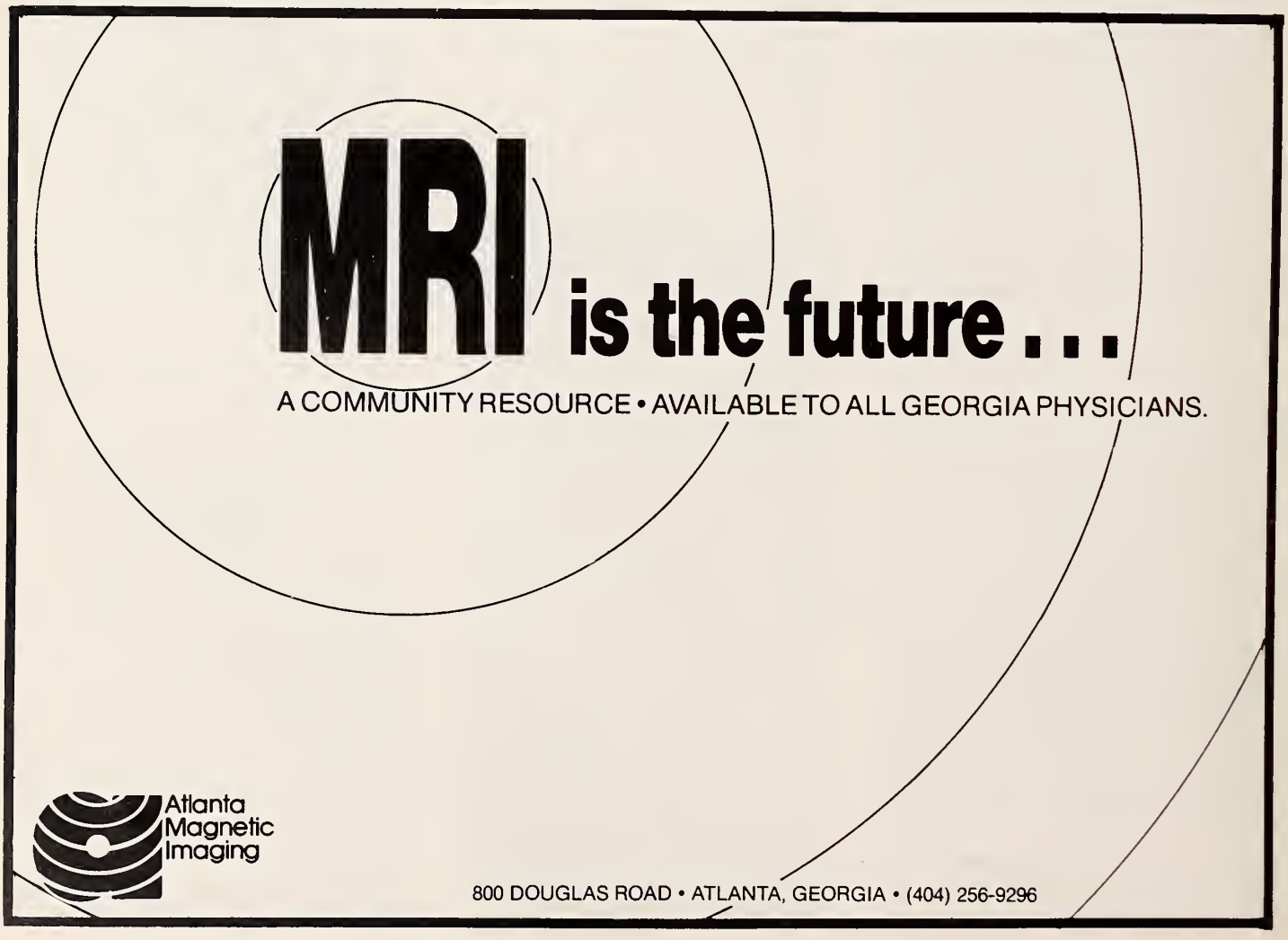
The committee discussed the wide variety of needs for the application of

ionizing radiation ranging from the limited x-rays performed in physicians' offices to those applications required in tertiary treatment centers, and the associated degree of knowledge that would be requried to operate the types of equipment involved at each level.

The committee also considered a Radiology Technology Bill which had been presented to the 1985 Georgia General Assembly. It was delayed from deliberation in 1985 to give time for the MAG and the Radiology Technologists to resolve their differences. The major hangup is the limitation the proposed bill would place on the physician's authority to delegate duties to a "qualified person" as specified in the Georgia Medical Practice Act. Committee members felt that the addition of authority to delegate in the proposed bill (43-34-169) would result in no change at all. However, to leave the bill as it was presented would place a restriction on physicians through the Medical Practice Act that would not apply to other health care professionals.

After in-depth discussion, including availability of training programs and the possibility of negotiating with manufacturers to provide operator training, the committee decided to request MAG legislative staff to draft language that would establish a two-tier certification process, with minimum requirements for those who perform limited x-rays in physicians' or other health professional offices, establishing more demanding requirements for those performing high technology diagnostic and/or any type therapeutic radiology procedures. The committee felt that the bill should serve to protect the patient wherever the x-ray procedure may be performed. Such a bill was presented to the 1986 Georgia General Assembly but it failed to pass.

We have recommended to the Executive Committee that this committee continue to serve.



Second Session — House of Delegates

Saturday, April 26, 1986

The Second Session of the MAG House of Delegates was called to order at 9:00 A.M., Saturday, April 26, 1986, in the Peach and Willow Ballrooms, Callaway Convention Center, Pine Mountain, Georgia, by Speaker Jack F. Menendez, M.D.

Dr. Menendez introduced William D. Logan, Jr., M.D., President of MAG, for an address to the House which was followed by an address to the House by the President-Elect of MAG, John D. Watson, Jr., M.D.

Dr. Logan introduced Harrison L. Rogers, Jr., M.D., President of the American Medical Association, for an address to the House.

Following Dr., Rogers address, the Speaker called for a report from the Credentials Committee which was given by Milton I. Johnson, Jr., M.D., Macon. Dr. Johnson reported 185 delegates and 23 alternate delegates were present, representing 42 component county medical societies. As provided in Chapter III, Section 3 of the Bylaws, a quorum was present.

Announcement of Election Reports

The Speaker announced that the results of the 1986 elections are as follows:

President-Elect: Jack F. Menendez, M.D., Macon
Second Vice President: Joe L. Nettles, M.D., Savannah
Speaker of the House: James A. Kaufmann, M.D., Atlanta
Vice Speaker of the House: Jack A. Raines, M.D., Columbus
AMA Delegate: S. William Clark, Jr., Waycross
AMA Delegate: Joe C. Stubbs, M.D., Valdosta
AMA Delegate: Carson B. Burgstiner, M.D., Savannah
AMA Delegate: F. William Dowda, M.D., Atlanta



(Left) William D. Logan, Jr., M.D., and John D. Watson Jr., M.D.



MAG's new president, John D. Watson, Jr., M.D. (right) swears in William D. Logan, Jr., M.D., Past President of the MAG, as the new AMA Delegate.

AMA Alternate Delegate: Beverly B. Sanders, Jr., M.D., Macon
AMA Alternate Delegate: Ellis B. Keener, M.D., Gainesville
AMA Alternate Delegate: James H. Sullivan, M.D., Columbus
AMA Alternate Delegate: William D. Logan, Jr., M.D., Atlanta
Judicial Council: Term ending in 1991 — Hugh F. Smisson, M.D., Macon

New Business

By acclamation, the House extended its appreciation to Speaker Menendez and Vice Speaker Kaufmann for their expertise in presiding over the activities of the MAG House of Delegates and to the MAG staff for its efficiency in coordinating all the functions required for a successful meeting.

Adjournment

There being no further business before the House of Delegates, the Speaker adjourned the 1986 House of Delegates at 3:00 P.M.

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Report of Reference Committee A

Richard E. DuBois, M.D., Chairman
C. Peter Lampros, M.D., Vice Chairman

During its meeting of April 25, Reference Committee A gave careful consideration to its referred reports and resolutions. The following physicians were members of that Committee: Richard E. DuBois, Chairman, Atlanta; C. Peter Lampros, Vice-Chairman, Toccoa; Toby S. Morgan, Rome; Joe S. Wilson, Atlanta; William A. Wolff, Columbus; Robert G. Bradbury, Savannah; James F. Beattie, Jr., Fort Oglethorpe; Alva Louie Mayes, Macon; and James S. Goodlet, Marietta.

Immediate Past President's Report

S. William Clark, Jr., M.D.

It has been a most exciting year. Your Medical Association continues to be an active, vibrant, and growing organization under the capable leadership of our President, Dub Logan, and supported by the work of an excellent staff led by Michael R. Fowler. Your Executive Committee has grappled with many issues and after full deliberation and debate has made decisions which will affect our lives in the practice of medicine for years to come.

There are those waiting in the wings who would lead our Association to new heights, beginning next year with John Watson, our President-Elect.

The house of medicine in Georgia has been strengthened during the past year. Response by the members in efforts for tort reform came from all quarters. Interest in and support of efforts to set up our own IPA/HMO, the "Georgia Health Network," and the "Georgia Physicians' Health Network" was also widespread.

The Auxiliary to the MAG is one of our most valuable assets. Those of us whose wives have served as state



Richard DuBois, M.D., Chairman of Reference Committee A.

President of the Auxiliary have long recognized the powerful potential this group has for the good of medicine in our state. It is great to see the Auxiliary finally coming into its own. It would strengthen the house of medicine to have all our spouses become involved. Unified membership would help accomplish this. It would also help the Auxiliary if each physician's spouse had her/his dues collected by the MAG at the time the physician pays his dues.

The Georgia Medical Care Foundation (GMCF) was formed by the MAG and was an integral part of the MAG for several years. When PSRO came on the scene, it was a requirement that the Foundation be a totally separate entity with a governing body independent from that of the MAG. When PRO supplanted PSRO, it again became appropriate for the state medical association, or a division thereof, to serve as the PRO. Our Foundation has continued to be a separate entity, answerable only to itself and the federal government.

The MAG House of Delegates in 1984 voted to expend several hundred thousands of dollars to upgrade our computer equipment to meet the perceived needs of the Foundation's PRO activities. Although this capital commitment was predicated on the Foundation's receiving a federal contract which would amortize our costs, during the year the Foundation, without prior consultation between the physician leaders of both organizations, cancelled the computer contract outright! Due to the complexity of this project, this may have been a necessary business decision, however, the absence of prior consultation is symptomatic of the lack of strong ties between the organizations.

It should certainly strengthen the house of medicine if the Foundation were brought back "in-house."

Recommendation:

That this House of Delegates direct the MAG leadership to exert appropriate efforts to accomplish the return of the GMCF under the umbrella of the MAG within the next year.

House Action:

Not adopted.

Public Health Committee

O. Grey Rawls, M.D., Chairman

The Public Health Committee met twice during the year 1985-86. The Committee planned and conducted three projects to promote the betterment of public health in Georgia.

1. Health Risk Appraisals in the Schools

The Committee initiated and organized a cooperative project to begin

systematic appraisals of health risks of Georgia's high schools students. Cooperating with MAG in this effort are the Department of Human Resources, the MAG Auxiliary, the State Board of Education, and the local school systems.

The appraisals consist of confidential tests (i.e., the results are known in aggregate not by individual) and on-site analysis of students' lifestyles. Factors such as diet, exercise, stress, use of drugs, alcohol, tobacco, and seat belt use are calculated to produce quantitative results for each student answering the questionnaire.

The results are explained immediately to the students and suggestions are made to encourage healthier lifestyles. The program also produces data on the students' needs so as to enable the schools to plan for health education courses.

Appraisals were performed at seven schools in various parts of the state in February 1986. This beginning, is, in effect, a pilot project and if it is proven to be successful, it will be expanded in the upcoming year.

2. No Smoking Brochures

In cooperation with the Public Relations Committee, the Public Health Committee printed 18,000 brochures on smoking for distribution to patients in physicians' offices. Through notices in the *Newsletter* and through an all-member mailing, MAG members were informed of the brochures and encouraged to order them for their offices.

By February, all 18,000 brochures had been ordered.

3. Public Service Announcements

At the request of the Public Health Committee, MAG's communications staff produced three PSA's on the hazards of smoking which were sent to all radio stations in Georgia. Similar PSA's will be a regular part of MAG's communication activities.

Recommendation:

That MAG express its appreciation to DHR and the Auxiliary for undertaking this joint project, and encourage both DHR and the Auxiliary to continue their involvement in the expanded program.

House Action:

Adopted as amended to read:

That MAG express its appreciation to DHR and the Auxiliary for undertaking this joint project, and encourage the DHR, the Auxiliary, and the Public Health Committee to continue and expand their program.

Resolution 8

Auxiliary Commendation

MAG Executive Committee

RESOLVED, that MAG recognizes and commends the excellent and outstanding work the Auxiliary has put forth in MAG's tort reform efforts.

House Action:

Adopted.

Resolution 9

Georgia Medical Care Foundation

Ocmulgee Medical Society

RESOLVED, that the Medical Association of Georgia terminate the affiliation with the Georgia Medical Care Foundation.

House Action:

Not adopted.

Resolution 12

Liability Insurance Crisis

DeKalb Medical Society, Inc.

RESOLVED, that the members of the MAG express tremendous concern over the problems all citizens throughout this state and nation are encountering:

- Growing problems of availability and/or affordability of liability insurance
- Access to health care
- Costs of health care or a result of increasing premiums and the need to practice "defensive medicine"
- Tremendous burden imposed on citizens as a result of the cost of the current system such as *legal fees* and *administrative processing*
- Delays in processing lawsuits and in remuneration for the claimant.
- Wide disposition in jury verdicts and frequency of exorbitant, excessive awards
- The social utility of punitive damages

Now, therefore, be it

RESOLVED, that our AMA Delegates introduce a resolution calling on the American Bar Association to join with AMA, insurance industry, local, state and federal governments, business coalitions and all "appropriate segments of the public" to "seek a broader consensus and means wherein we may equitably and expeditiously compensate persons injured in our society in whatever manner."

House Action:

Not adopted.

Resolution 13

Commendation of MAG Professional Liability Insurance Committee

DeKalb Medical Society, Inc.

RESOLVED, that the House of Delegates commend Dr. Fokes and the MAG Professional Liability Insurance Committee for its work, and be it further

RESOLVED, that this committee be reappointed for the coming year in order to carry on its important work and maintain the continuity it established during the previous year.

House Action:

Adopted.

Resolution 14
MAG Membership

Ralph A. Tillman, M.D.
Delegate, Dekalb Medical Society

RESOLVED, that the MAG Membership Committee be instructed to aggressively seek out, by mailings and otherwise, all physicians eligible for membership in MAG who for whatever reason are not members and attempt to:

a) Gain insight into why they are not active members in MAG, and
b) Explore any grievances they may have with the MAG, and
c) Gain their support and membership in the MAG, and,
d) Report these findings to the Board of Directors of MAG prior to 10/30/86 along with suggestions or recommendations as to how MAG may best react to the information so obtained.

Fiscal Note: Covered by request for Membership Committee

House Action:

Adopted and referred to MAG Board of Directors for implementation.

Resolution 15
Insurance Programs Endorsed by MAG

Ralph A. Tillman, M.D.
Delegate, DeKalb Medical Society

RESOLVED, that the Board of Directors instruct the MAG Insurance Committee to meet in the very near future and evaluate the programs that are now being promoted as having been endorsed by MAG, and, be it further

RESOLVED, that the MAG Insurance Committee explore the *needs* and potential *means* of providing insurance coverage for retired MAG members, widows (or widowers) of ex-MAG members, and, be it further

RESOLVED, that the MAG Insurance Committee make a genuine effort to establish prudent guidelines that may be used in the development of a policy for future consideration in the endorsement of insurance programs by the Executive Committee and Board of Directors of MAG.

House Action:

Adopted.

Resolution 16
Liability Insurance Premiums

Duane Blair, M.D.
Delegate, DeKalb Medical Society
Ralph A. Tillman, M.D.
Delegate, DeKalb Medical Society

RESOLVED, that the Board of Directors of the Medical Association of Georgia be empowered to work through the Insurance Committee of MAG, all major medical liability insurance carriers and whatever state agency necessary to "close the gap" somewhat by reducing the number of physician categories and altering the premium schedules such that all physicians would share the burdens being imposed on those in the "high-risk" categories.

House Action:

Not adopted.

Resolution 23
IPA/HMO
DeKalb Medical Society

RESOLVED, that MAG withdraw economic and leadership support and sever direct ties to the IPA/HMO or all members be given the opportunity to remain in local county medical societies and withdraw from MAG membership.

House Action:

Adopted the following substitute resolve:

RESOLVED, that the MAG Board of Directors be directed to form a balanced committee for the ongoing study of all relationships of the MAG IPA/HMO activities and finances and report back to the House of Delegates in 1987 and annually.

Resolution 25
Medical Peer Review

Luther M. Thomas, M.D.
Delegate, Richmond County Medical Society

RESOLVED, that this House of Delegates reaffirm that the Georgia Medical Care Foundation is and shall remain the principal peer review organization for the physicians of Georgia.

House Action:

Adopted as amended to read:

RESOLVED, that this House of Delegates reaffirm that the Georgia Medical Care Foundation is and shall remain the principal peer review organization for the physicians of Georgia; and be it *resolved* that the MAG request that the GMCF develop a program to educate all physicians regarding the appeals process; and further be it *resolved* that the Liaison Committee from the GMCF to MAG be more active in reporting the activities of the GMCF to the Board of Directors of MAG; and further be it *resolved* that the Liaison Committee give quarterly reports on the status of denials to the Board of Directors.

Resolution 26
IPA/HMO
DeKalb Medical Society

RESOLVED, that MAG sever its

relationship with the IPA/HMO immediately by prohibiting any MAG officers from serving as an officer of the IPA/HMO and any staff from providing, either directly or indirectly, administrative and/or supervisory services to the IPA/HMO, and, be it further

RESOLVED, that MAG's name not be used in any way in the marketing and advertising efforts of the IPA/HMO.

House Action:

Same as that for Resolution 23 also considered by Reference Committee A.

Resolution 29

Appealing Denial of Hospital Stay

Hall County Medical Society

RESOLVED, that the Medical Association of Georgia with or without appropriate hospital input, create a statewide organization for aiding the appeal of properly screened denials.

House Action:

Not adopted.

Resolution 34

Resident Membership in MAG

RESOLVED, that the Constitution and Bylaws Committee study a mechanism to facilitate resident physician membership in MAG when the processing of resident applications by county medical societies requires a lengthy period of time.

House Action:

Adopted as amended to read:

RESOLVED, that the Membership Committee develop a mechanism to expedite resident physician membership in MAG by July 1, 1986.



Chairman of Reference Committee F, James H. Sullivan, M.D., of Columbus.



Harrison L. Rogers, Jr., M.D., was the keynote speaker of the Second Session of the House of Delegates.



William D. Logan, Jr., M.D., of Atlanta, 1985-86 President of the MAG.



MAG's Executive Director, Michael Fowler, speaking at the meeting of the Board of Directors on Thursday, April 24.

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* **WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may oe aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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To dull the point of moderate to moderately severe pain...

vicodin® III

hydrocodone bitartrate 5 mg (Warning: May be habit forming.)
with acetaminophen 500 mg

Brief Summary

INDICATIONS AND USAGE: For the relief of moderate to moderately severe pain.
CONTRAINDICATIONS: Hypersensitivity to acetaminophen or hydrocodone.

WARNINGS

Drug Abuse and Dependence: VICODIN is subject to the Federal Controlled Substances Act (Schedule III). Psychic dependence, physical dependence and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN should be prescribed and administered with the same caution appropriate to the use of other oral-narcotic-containing medications.

Respiratory Depression: At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.

Head Injury and Increased Intracranial Pressure: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute Abdominal Conditions: The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

PRECAUTIONS

Special Risk Patients: VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.

Information For Patients: VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

Cough Reflex: Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

Drug Interactions: The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

Usage in Pregnancy: Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nonteratogenic Effects: Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.

Labor and Delivery: Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

Nursing Mothers: It is not known whether this drug is excreted in human milk, therefore a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.

Genitourinary System: Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

Respiratory Depression: (See WARNINGS.)

DOSAGE AND ADMINISTRATION: Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.

The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982

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Report of Reference Committee B

William R. Hardcastle, M.D., Chairman
William H. Whaley, M.D., Vice Chairman



Members of Reference Committee B.

During its meeting of April 25, Reference Committee B gave careful consideration to its referred reports and resolutions. The following physicians were members of that Committee: William R. Hardcastle, Chairman, Decatur; William H. Whaley, Vice Chairman, Atlanta; Sidney A. Bell, Rome; William B. Jones, Gainesville; Carl V. Hancock, Jr., Albany; Gerald E. Sanders, Marietta; E. M. Molnar, Columbus; J. Robert Logan, Savannah; Minor C. Vernon, Macon.

Access to Medical Care Committee

M. Julian Duttera, Jr., M.D.

Appalachian Regional Commission Physician Recruitment Program:

Through a grant from the ARC the MAG developed a community-based, regionalized program for physician recruitment in Appalachia Georgia. Over the contract period, 9/83 through 9/85, primarily through the services of an independent contractor, Lamont D. Nottingham, manpower problems in the 35 Appalachian Counties in Georgia were identified and contacts with resources that could address these needs were established. The final report of this contract contains detailed information about this project and how the principles applied in these counties, communities, etc. may be applied to any area of the state. This report is available to anyone upon request to MAG Headquarters.

Medical Fair:

The 1985 Medical Fair was highly successful. One hundred thirty residents were given the opportunity to be interviewed by representatives of 40 Georgia counties. Because of limited space, several communities were turned away. Conflicts which had arisen among the sponsors of the Medical Fair have been resolved.

At its July 20 meeting, the Executive Committee approved our request to explore the possibility of MAG assuming the leadership role in coordinating the Medical Fair, with the proviso that the situation be discussed with other sponsoring members of the Fair and further consideration be given to the 15,000 population limitation.

At its September '85 meeting, the Executive Committee approved the Access to Medical Care Committee recommendation that the MAG support the Joint Board of Family Practice to become the principal coordinator of the Medical Fair. In reaching this decision, the committee considered the following:

1. The State Medical Education Board does not want to continue as the coordinator.
2. The 15,000 criteria remains.
3. The Joint Board has recently hired two people who will be involved in full-time recruitment and retention activities. It has already been involving other specialties.
4. The other sponsors indicated they would support either the MAG or the Joint Board.

Access to Medical Care Committee members unanimously agreed that the MAG should continue to support the Medical Fair both in administrative staff and resources, and up to a $2,000 contribution. The 1986 Medical Fair will be held October 17-18 at the Atlanta Airport Marriott.

Computerized Placement Service:

The current Placement Service listing of 10 "opportunities" for physicians consists primarily of proprietary recruiting firms. The current physician listing contains information from 50 physicians, most of whom are out of state. Your committee agreed that the Placement Service should be continued through this next year, incorporating those communities/opportunities and physicians who participate in both the Medical Fair and the Physician Placement Expo '87 (see below). The committee will review this expanded program and make other recommendations to the appropriate MAG governing body as deemed advisable.

Physician Placement Expo '87:

This is the title the committee agreed to give a statewide job fair which it is recommending the MAG initiate. The committee reached agreement on the following aspects of this proposal:

—The primary emphasis will be directed toward involvement of specialties. The following organizations will be asked to cosponsor the meeting: the Georgia Hospital Association, the Joint Board of Family Practice, all interested specialty societies (work through the MAG Interspecialty Panel), and the Georgia Chapter of the Group Practice Association.

—It will be directed primarily toward those areas not included in the Medical Fair. However, if there are Medical Fair participants who also wish to participate in this program, they would not be excluded.

—In addition to contacting all groups outlined above, residents from all Georgia Residency Programs, recent graduates of Georgia medical schools (2-6 years out of school), and others as may be identified later will be invited to participate.

—The meeting will be held in an Atlanta hotel (Airport Marriott suggested) in mid-March 1987.

—It will be a one-day meeting (10:00 a.m.-7:00 p.m.) devoted to interviews, with lunch and cocktail party from 5:00 p.m.-7:00 p.m.

—A registration fee of $10.00 will be charged residents; $50.00 for nonresident physicians.

—Opportunity display booths of "X" size will be available at a registration fee of $500.00. An additional registration fee would be required for more space.

—Proprietary recruitment firms will be accepted, provided they are recruiting for practice in Georgia. If one agency represents more than one Georgia opportunity, each opportunity should be registered separately at $500.00 for one, and $250.00 each for all others.

—Incentives will be developed to assure that residents and other physicians do in fact spend time talking with opportunity representatives, e.g., either very nice prizes or money for physicians who talk with representatives at "X" number of booths.

Recommendations:

1. That MAG continue to participate in the Medical Fair.
2. That MAG proceed with the organization of the Physician Placement Expo '87.

Fiscal Note:

Funds to proceed with these two projects have been included in the proposed MAG 86-87 budget.

House Action:

Adopted Recommendation 1.

Adopted Recommendation 2, with the following additional amendments:

That the Committee carefully screen participants in the recruitment process, and

That the effectiveness of the Physician Placement Expo '87 be evaluated and a report filed with the appropriate MAG authority.

Constitution and Bylaws Committee, Report A

Article V, Section 1

J. Rhodes Haverty, M.D., Chairman

Your Committee on Constitution & Bylaws proposes the following amendment to Article V of the Constitution, pertaining to the House of Delegates:

SECTION 1. COMPOSITION. The House of Delegates is composed of delegates elected by the component county medical societies, the Resident Physician ~~House-Officers~~ Section, the Medical Student Section ~~Georgia-Medical-Schools,~~ Medical Staff Section, all delegates' qualifications and terms of office shall be provided for in the Bylaws. The officers, the Past Presidents of the Association, the Editor of the *Journal,* delegates to the AMA, the Executive Director, and Chairpersons of standing committees shall be ex-officio members of the House of Delegates without the right to vote.

This amendment to the Constitution does not effect any change of policy, but rather is a housekeeping change.

The House Officers Section is renamed the Resident Physician Section. This change brings MAG into conformity with most other state medical associations and with AMA.

The insertion of "Medical Student Section" in lieu of "Georgia Medical Schools" clarifies that the students, through their student organizations, elect their nonvoting representatives to the House. The Medical Schools *per se* do not elect.

This amendment was approved by the 1985 House, and has lain on the table for one year awaiting final House action in 1986.

House Action:

Adopted.

Constitution & Bylaws Committee, Report B

Chapter IV, Section 2, 12

J. Rhodes Haverty, M.D., Chairman

Your committee on Constitution and Bylaws proposes the following changes to the Bylaws.

Chapter IV, Section 2

The Resident Physician ~~House Officers~~ Section shall be entitled to one voting delegate and alternate delegate. These delegates shall be elected by the Section and shall be members in good standing with the MAG.

Notwithstanding any deadline established for the introduction of resolutions to the House of Delegates, the Medical Staff Section and the Resident Physician ~~House Officers~~ Section shall have the right to adopt resolutions at their meetings immediately preceding the House of Delegates and to have their resolutions introduced at the opening session of the House.

SECTION 12. RESIDENT PHYSICIAN ~~HOUSE OFFICERS~~ SECTION. The Resident Physician ~~House Officers~~ Section is composed of Resident Members of the Association who are serving in approved training programs in the State of Georgia. The functions and structure or this resident business section shall be formulated by the MAG Board of Directors.

These amendments alter the Bylaws so as to reflect the Constitutional amendment contained in Report A.

House Action:

Adopted.

Constitution & Bylaws Committee, Report C

Chapter X, Section 4

J. Rhodes Haverty, M.D., Chairman

Your Committee on Constitution & Bylaws proposes the following amendment to Chapter X, Section 4, of the Bylaws:

SECTION 4. JUDICIAL COUNCIL. The Judicial Council, a standing committee of the MAG, shall consist of five active members of the MAG elected by the House of Delegates on nomination of the President for terms of five years. Members elected to the Judicial Council shall resign all other positions held by them in the Association upon their election to the Judicial Council. No member, while serving on the Judicial Council, shall be a Delegate, or an Alternate Delegate, to the MAG House of Delegates, or a general officer of the Association, or hold any other elected or appointed position whatsoever in the Association. A member of the Judicial Council shall, however, be permitted to serve as ~~This provision shall not apply to any member who may~~ be a delegate, alternative delegate or general officer of the American Medical Association.

The purpose of this amendment is to clarify the meaning of the Bylaws as interpreted by the Judicial Council. The present language is ambiguous, and could be interpreted as permitting a Judicial Council member to serve as committee members and chairman and hold positions other than those enumerated.

House Action:

Adopted.

Constitution & Bylaws Committee, Report D

Chapter II, Sections 9, 10

J. Rhodes Haverty, M.D., Chairman

Your Committee on Constitution & Bylaws proposes that Sections 9 and 10 of Chapter II of the Bylaws be rewritten and expanded.

Present Sections 9 and 10:

SECTION 9. REINSTATEMENT. No person may become a member of the MAG who has been judged guilty of a crime involving moral turpitude, or convicted of a felony, or whose license has been suspended or revoked by the Composite State Board of Medical Examiners. However, at the discretion of the MAG Judicial Council, such person may become a member of the Association, or may be reinstated, upon receiving a recommendation for membership or reinstatement from that person's component county medical society, and upon satisfaction of all other MAG membership requirements.

SECTION 10. SUSPENDED OR EXPELLED MEMBERS. A member suspended or expelled from membership in the Association shall no longer be a member of the Association and shall have none of its privileges during the period of suspension or after expulsion.

Proposed New Sections 9 and 10:

SECTION 9. SUSPENSION AND EXPULSION. No person may become or remain a member of the MAG who has been judged guilty of a crime involving moral turpitude, or convicted of a felony, or whose license has been suspended or revoked by the Composite State Board of Medical Examiners.

Upon official notice from the component medical society that a member has been judged guilty or a crime involving moral turpitude, or convicted of a felony, or upon notice from the Composite State Board of Medical Examiners that a member's license to practice has been suspended or revoked, that physician's name shall be removed from the membership rolls. However, at the discretion of the MAG Judicial Council, such person may become a member of the Association, or remain a member, upon receiving a recommendation for membership or reinstatement from that person's component county medical society, and upon satisfaction of all other MAG membership requirements.

A member suspended or expelled from membership in the Association shall no longer be a member of the Association and shall have none of its

privileges during the period of suspension or after expulsion.

SECTION 10. REINSTATEMENT. A suspended member may once again become a member upon reapplication to the local county medical society and final approval by MAG's Judicial Council, provided, however, that all other requirements for membership have been met.

House Action:

Adopted.

Constitution & Bylaws Committee, Report E

Chapter VIII, Section 7

J. Rhodes Haverty, M.D., Chairman

Your Committee on Constitution and Bylaws proposes the following amendment to Chapter VIII, Section 7 of the Bylaws, pertaining to the duties of component medical societies:

SECTION 7. DUTIES. Each component county society shall meet the ~~five~~ seven minimum standards set forth in this Section. Each society shall: (a) meet a minimum of four times a year, elect officers and delegates annually at a meeting before February 1st, and report these officers to the headquarters office before February 1; (b) maintain an up-to-date constitutiuon and bylaws in conformity with the Constitution and Bylaws of the Medical Association of Georgia and shall transmit a copy of its constitution and bylaws, along with any amendments thereto, to the headquarters office for the Association's records; (c) maintain a Board of Censors and/or a Mediation Committee; (D) maintain minutes of each meeting in a permanent record book that will be available for inspection at all times; ~~and~~ (e) maintain scheduled programs at a minimum of four meetings annually; (f) maintain an accurate and up-to-date roster of its members and promptly notify the Association of any additions to or deletions from its membership; and (g) notify the Association of any action taken by the component medical society or action known to the component medical society taken by any other body which affects any member's eligibility for membership in the Association.

House Action:

Adopted.

Medical Practice Committee

E. C. Evans, M.D.

During this past year, the Medical Practice Committee has considered issues relating to a variety of subjects.

I. *Do Not Resuscitate (DNR) Guidelines:*

Despite the complexity of the issues involved in decisions to or not to resuscitate, initiate or terminate treatment, etc., the committee proceeded to develop DNR Guidelines. In its deliberations, the committee reviewed DNR Guidelines from other states, AMA Judicial Council Opinions, other information from the AMA, and additional information regarding state laws governing living wills and durable Power of Attorney documents. In using these guidelines, hospital medical staffs and governing bodies are encouraged to develop and implement their own DNR policies consistent with their respective Bylaws, Rules and Regulations.

II. *Home Health Agencies:*

Home health care is big business. With the emphasis on early discharge from hospitals and probable increased future emphasis upon keeping the elderly out of nursing homes, it promises to grow into even bigger business.

In 1980 the Georgia General Assembly passed a law regulating home health services; this law followed federal policy authorizing payment for home health services under Medicare. Between the passage of the law in 1980 and the implementation of the Certificate of Need (CON) requirement effective February 6, 1981, the number of Home Health Agencies in Georgia grew from four or five to approximately sixty. After implementation of CON, a few more were licensed, bringing the total to around seventy. It is now difficult to obtain CON for new agencies.

As home health care has become a more important modality in the overall medical care picture, a number of problems and questions involving physicians in practice have come to the forefront. For example, the AMA 1985 House of Delegates adopted the following resolution:

"Resolved, that the American Medical Association call upon the nation's physicians to write or carefully review all initial and renewal orders for home health services and approve only those that are medically indicated; and be it further

"Resolved, that the AMA urge physicians to report to appropriate payment agencies and regulatory authorities cases of abusive practices by home health agencies; and be it further

"Resolved, that the AMA urge physicians not to authorize the provision of home health services to any patient with whom he or she is not professionally involved in providing care."

Adoption of the Resolution was motivated by concern for assuring that the services provided to any patient by a home health agency are those adjudged appropriate to the patient's needs by a physician involved in that patient's care.

The MAG Medical Practice Committee plans to continue to study the issues related to home health care in Georgia — in particular, to seek answers to questions such as the following:

1. Does the expansion of home health care truly result in reduction of the cost of medical care, e.g., comparative costs?
2. How may the physician be assured of the quality of the care given his/her patients?
3. What is the physician's legal liability in the management of his/

her patient receiving home health care?
4. How may the physician "Case Manager" receive adequate financial reimbursement for services to the patient receiving home health care?
5. What is the extent of abuse, if any, of home health care services in Georgia?
6. How do HMOs, PPOs handle home health care services, e.g., structure, quality assurance, cost/charges, etc?

III. *AMA Health Policy Agenda for the American People:*

The Medical Practice Committee had an opportunity to review 150 policy recommendations developed by the AMA Work Groups established to draft principles and policy proposals relating to: 1) medical science; 2) health professional education; 3) health resources; 4) delivery mechanisms and processes; 5) evaluation, assessment and control; and 6) payment for services. (See committee file for relative information.) Committee members raised several questions relating to the recommendations. The Medical Practice Committee Chairman, who serves as MAG representative to the Advisory Committee of the HPA, will take these questions to the next meeting of the Advisory Committee.

IV. *Hospital Medical Staff Liaison:*

The charge to this committee includes the "responsibility for promoting liaison between physicians and hospitals." At the time of this report, the committee is developing a survey of hospital staffs to determine the extent of their interest in, or problems with, a number of subjects, including the following:

Home health care; establishment of ethics committees; impact of DRGs on medical practice; and PRO/Peer Review issues.

Recommendation:

1. The Medical Practice Committee recommends that the MAG approve the following DNR Guidelines for distribution to hospital medical staffs for their implementation as they deem appropriate:

DNR Guidelines

It is widely recognized that in some patients the initiation of potentially life-prolonging treatment is inappropriate. While there may be a variety of situations in which it is advisable to withhold or withdraw medical treatment, the guidelines presented here cover only one specific aspect of the dilemmas created by modern technology — the issues surrounding the question of whether or not to initiate cardiopulmonary resuscitation (CPR) when the patient experiences an acute cardiac or pulmonary arrest.

The following are intended to be guidelines for physicians and hospitals. Hospital medical staffs and governing bodies are encouraged to develop policies consistent with their respective Bylaws, Rules and Regulations.

Definition

DNR (Do Not Resuscitate) means that, in the event of a cardiac or respiratory arrest, cardiopulmonary resuscitative measures will not be carried out.

Background

1. An appropriate knowledge of the patient's medical condition is necessary.
2. The attending physician should determine the appropriateness of a DNR order for any given patient.
3. DNR orders are compatible with maximal therapeutic care. A patient may receive vigorous support in all other therapeutic modalities and yet a DNR order may be justified.
4. When a patient is capable of making his/her own judgments, the DNR decision should be reached consensually by the patient and physician. When the patient is not capable of making his/her own decision, the decision should be reached after consultation between the appropriate family member(s) or other surrogate for the patient, and the physician. If a patient disagrees, or in the case of a patient incapable of making an appropriate decision, the family member(s), or other surrogate, disagree, a DNR order should not be written.

Implementation

1. Once the DNR decision has been made, this directive shall be written as a formal order by the attending physician. A verbal or telephone order for DNR cannot be justified as a sound medical or legal practice except in case of an acute emergency wherein the order is necessary before the attending physician or physician representative has had the opportunity to write it.
2. It is the responsibility of the attending physician to insure that this order and its meaning are discussed with appropriate members of the hospital staff.
3. The facts and considerations relative to this decision shall be recorded by the attending physician in the progress notes.
4. The DNR order shall be subject to review at any time by all concerned parties on a regular basis and may be rescinded at any time.

House Action:

Adopted the following amendment:

That the MAG encourage hospital medical staffs and governing bodies to develop and implement their own Do Not Resuscitate policies consistent with their respective bylaws, rules and regulations.

Medicine & Human Values Committee

Richard B. Stewart, M.D.

During 1984-85, the Medicine & Human Values Committee identified several issues which it felt the MAG should address. During this year (85-86), the committee considered the following:

Reference Committee B

A. *Medical Care for the Indigent:*

Problem: Physician participation in indigent medical care is decreasing — 36% of U.S. population is at or below the poverty level.

Discussion: The committee discussed the historical perspective of indigent care from the days when physicians treated indigent patients without pay, through the initiation and rapidly increasing costs of government pay programs, e.g., Medicaid and to a great extent Medicare, to the present.

The committee recognizes that most physicians have continued to provide some indigent care through this time. However, cost-cutting measures of all payers for medical care are forcing a rapidly increasing need for physicians to assume even a larger role in providing medical care to those who do not have the resources to pay for it. The committee agreed that care of the indigent is not just a medical problem. Cultural changes are needed. Dr. Randall described a HUD project in Cobb County, "Project Self-Sufficiency," which is directed toward education and motivation of the indigent with emphasis on improvement of self image. The Grady/Emory teenage project on postponing sexual involvement; and a project directed toward teenage pregnancies in Thomasville were cited as examples of other programs directed toward social problems. An "Operation Care"-type program in which medical staff would devote X amount of time to indigent care was suggested.

Members also discussed the need for physicain attitude change. Traditionally, physicians accepted responsibility for the poor — many were treated in hospitals by house officers. The feeling that "we learned from the poor, we owe them" changed when third party payers, Medicare and Medicaid in particular, began paying for medical care for the poor. The idea that everyone has the right to medical care expanded rapidly into individuals feeling that everyone has the right to "Cadillac" medical care. Now cost reduction efforts are forcing limits to what can be provided.

The committee decided to pursue the development of a recommendation on indigent care for consideration by the appropriate MAG body.

B. *Fairness in Allocation of Resources:*

The committee perceived the need for physicians to consider the moral and ethical aspects of medical care in the disproportionate distribution of resources.

—Technological changes that result in millions of dollars spent for exotic procedures such as heart transplants — while funds are being reduced for programs designed to help the poor.

—Looking at society as a whole, it is not possible for us to do all we can do. Where do we cut? Who gets care? Consider terminal patients — do we continue treatment and hope for a miracle or do we cut off treatment at a predetermined time or age?

—Emotionally, everyone wants the best medical care, including the most up-to-date technology, but the economic practicality is real — someone has to say we can't.

How to resolve these questions? Acknowledging that there is no one resolution and there are wide variations of all aspects of this issue, one tool open to hospitals is the establishment of Ethics Committees to address specific problems in their own facilities.

C. *Care of the Mentally Ill and Mentally Retarded:*

The committee looked at this problem from the concept of long-term treatment by outlining the "rights" and "obligations" of the people involved. In this context, a disturbing trend is revealed, particularly in institutional care, away from the philosophy of taking care of the mentally ill to giving them the "rights" that criminals have. It appears that attorneys are making mental illness their responsibility and psychiatrists are "staying away in droves" from this type setting.

Concern arises about services provided by paramedical personnel. Many anecdotal reports relate to concern about the quality of care in community mental health clinics which are staffed in large measure by paramedical personnel. Also, there is concern about the impact on costs of medical care resulting from charges by paramedical care, including psychologists, social workers, and aides in excess of those from psychiatrists.

The committee also discussed the increasing public health problem of "street people." A substantial number of these people are people who have been "deinstitutionalized" from the mental health facilities. Many are now in jails.

It became obvious that increasing restriction on the medical care available for the indigent patient is a major factor in each of these three issues. The committee decided to direct a straightforward recommendation to physicians: that the MAG urge physicians to devote 10% of their time toward care of the indigent.

D. *Abortion:*

The committee requested MAG Executive Committee approval to poll the membership about this issue. The Executive Committee stated that existing policy met the needs of the Association.

E. *Information:*

The committee received information relating to the following subjects. This information is available to the membership upon request to MAG Headquarters.

—AMA Committee on Medicine & Religion/Human Values: At its June '85 House of Delegates meeting, the AMA adopted Report SS of the AMA Board of Trustees which emphasized the role of the AMA in setting and maintaining ethical standards of the medical profession, and changed the name of the AMA Judicial Council to the *Council on Ethical and Judicial Affairs*.

—Copies of the opinions of the AMA Judicial Council relating to:

Physician-Patient Relationships: Respect for Law and Human Rights
Terminal Illness — Patients' References

New Medical Procedures
Conflict of Interest Guidelines
Ethics Committees in Health Care Institutions

Recommendation:

That the MAG urge physicians to devote 10% of their time to treatment of indigent patients.

House Action

Adopted the following amendment:

That the Medical Association of Georgia urge physicians to continue to provide medical care for indigent patients in order that no patient be deprived of care because of his or her inability to pay for it.

Resolution 1

Admission of Doctors of Osteopathy to Medical Association of Georgia

Walker-Catoosa-Dade County Medical Society

RESOLVED, that Doctors of Osteopathy are hereby declared to be eligible to become members of the Medical Association of Georgia in accordance with the existing Bylaws which govern membership in said Association, and Bylaws now in effect in conflict with this Resolution are hereby amended to this extent, but no further.

House Action:

Withdrawn with consent of House.

Resolution 4

Medicare Hospitalization Appeals Procedures

Hall County Medical Society

RESOLVED, that the Medical Association of Georgia create a permanent watch-dog committee for liaison with and surveillance over the PRO of Georgia. This committee should investigate the appropriateness of the "Intensity of Service criteria" and the "Severity of Illness criteria" and work with the PRO of Georgia to insure that these criteria are flexible enough to be appropriate to their purpose or altered within the scope of the law to achieve that end. Also, that the watch-dog committee serve as a clearinghouse for complaints from physicians in the Medical Association of Georgia and to assist the PRO of Georgia in the development of a workable and feasible appeals process in order to resolve these complaints for the betterment of the patients of the physicians of the Medical Association of Georgia.

House Action:

See House Action for Resolution 5.

Resolution 5

Standards for Third Party Reviewers of Physician Claims

Hall County Medical Society

RESOLVED, that the Medical Association of Georgia establish standards for the reviewers and the reviewer-physician contact to lessen this tension, and be it further

RESOLVED, that the following be included in these standards:

1. Physician reviewers should have publicly available credentials and should be clinicians actively involved in patient care.
2. Physician reviewers should not have quotas and should not be retained or dismissed on the number of adverse or supporting decisions.
3. The phone contact by a physician or non-physician reviewer should be brief. Items such as contract numbers or policy holder names should be obtained before the physician-reviewer phone call.

House Action:

Adopted the following substitute Resolution in lieu of both Resolutions 4 and 5:

RESOLVED, that the MAG appoint a committee to work with the PRO and other utilization reviewers to address problems created by their review processes, and that MAG members be advised that this committee is available to help them resolve significant problems, and report quarterly to the Board of Directors on progress being made toward working out those problems.

Resolution 6

Preadmission Certification

Muscogee County Medical Society

RESOLVED, that preadmission requests by third party payors is a service by physicians to third party payors which is unrelated to patient service and that such third party payors are obligated to pay separately for these services.

House Action:

Adopted.

Resolution 22

Tort Reform

DeKalb Medical Society, Inc.

RESOLVED, that MAG establish tort reform as its highest priority, and be it further

RESOLVED, that MAG assess each member $500 to finance this program over the coming year, and be it further

RESOVLED, that MAG shelve all activity on its HMO/IPA for one year or until meaningful tort reform has been enacted in order that we can devote maximum energy and resources to this urgent cause.

House Action:

Adopted the following amendment:

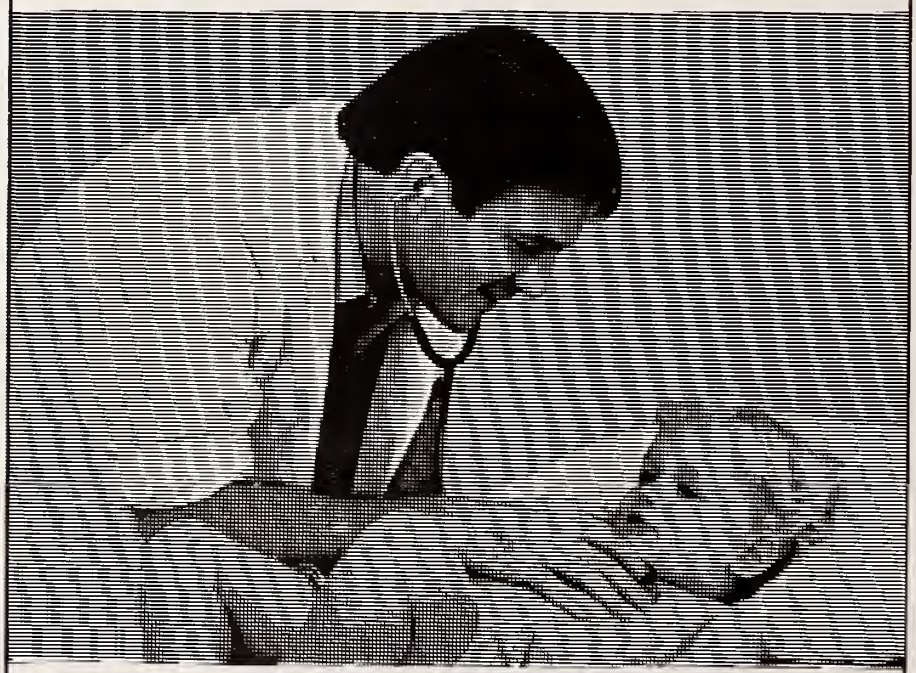
That the Medical Association of Georgia devote maximum energy and resources to the urgent cause of enacting meaningful tort reform.

PHYSICIANS, WE SCHEDULE OUR TIME TO FIT YOUR TIME.

We're very flexible in the Army Reserve about time. We take into account your practice, your time and availability.

We're not flexible about the quality of medicine. We demand much of ourselves and of every member of our medical team.

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J-6138 January 1986

"High blood pressure should be a red flag to screen for cholesterol..."[1]



Wyeth Laboratories
Philadelphia, PA 19101

If your patients have hypertension, they probably have high cholesterol too.

The Framingham Heart Study[2] showed that over two thirds of the 35 and older population in that study with systolic blood pressures over 145 mmHg also had serum cholesterol levels of 225 mg/dL or more, and 46% had levels above 250 mg/dL.

While many clinical laboratories still report 250 mg/dL as "normal" cholesterol, the NIH Consensus Development Conference Statement on Cholesterol and Heart Disease[3] stated that any level above 220 mg/dL is associated with a significantly increased risk of coronary heart disease.

You need to know, because high cholesterol parallels high blood pressure as a CHD risk factor.

Epidemiological studies and large-scale prevention trials have indicated that as with blood pressure, serum cholesterol levels are proportionately related to CHD risk.

Specifically, *"...for every 10 mmHg rise in pressure, there appears to be about a 30% rise in cardiovascular risk."*[4] *"...for every one percent you go up the American cholesterol scale, your subsequent rate of heart attack rises two to three percent."*[5]

And although the specific impact on CHD has not been determined, we know that many of the principal agents used to lower blood pressure actually increase cholesterol.

Wytensin® lowers blood pressure effectively without raising cholesterol.

While Wytensin is not a cholesterol-lowering agent and is not indicated for the treatment of hyperlipidemia, in controlled clinical trials[6] it caused a slight, sustained decrease in total cholesterol without reducing the HDL fraction or altering serum triglycerides.

At the same time, Wytensin lowered blood pressure as effectively as hydrochlorothiazide, propranolol, clonidine or methyldopa. Drowsiness and/or dry mouth, the most frequent side effects noted with Wytensin, usually diminish or disappear over time. In fact, in double-blind studies to date, discontinuance of therapy for all side effects occurred in about 13% of patients.

WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol



See important information on following page.

References: 1. Glueck CJ: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 2. *The Framingham Study, An epidemiological investigation of cardiovascular disease*, Section 28, U.S. Dept. of Health, Education, and Welfare. 3. National Institutes of Health Consensus Development Conference Statement, 1984; Vol 5, No 7, p 4. 4. Chobanian AV: The influence of hypertension and other hemodynamic factors in atherogenesis. *Progress in Cardiovascular Diseases, XXVI* (3): 177, Nov/Dec, 1983. 5. Castelli WP: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 6. Data on file, Wyeth Laboratories.

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WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic.

Contraindication: Known sensitivity to the drug.

Precautions: 1. Sedation: Causes sedation or drowsiness in a large fraction of patients. When used with centrally active depressants, e.g., phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2. Patients with vascular insufficiency: Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure. 3. Rebound: Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology.

INFORMATION FOR PATIENTS: Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy. Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly.

LAB TESTS. In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction. In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS: **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e.g., digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials. However, potential for increased sedation when given concomitantly with CNS depressants should be noted.

DRUG/LAB TEST INTERACTIONS: No lab test abnormalities were identified with **Wytensin** use.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e., about 10 times maximum recommended human dose. In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes. No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture. In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY: Pregnancy Category C. WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN. A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg. These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits. However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg). Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg. There are no adequate, well-controlled studies in pregnant women. **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus.

NURSING MOTHERS. Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE: Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S. and is based on data from 859 patients on **Wytensin** for up to 3 years. There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b.i.d.

Adverse Effect	Placebo (%) n = 102	**Wytensin** (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial. Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time. In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20%. Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less: Cardiovascular—chest pain, edema, arrhythmias, palpitations. Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort. Central nervous system—anxiety, ataxia, depression, sleep disturbances. ENT disorders—nasal congestion. Eye disorders—blurring of vision. Musculoskeletal—aches in extremities, muscle aches. Respiratory—dyspnea. Dermatologic—rash, pruritus. Urogenital—urinary frequency, disturbances of sexual function. Other—gynecomastia, taste disorders.

Drug Abuse and Dependence: No dependence or abuse has been reported.

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years. Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both. Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic. Vital signs and fluid balance should be carefully monitored. Adequate airway should be maintained and, if indicated, assisted respiration instituted. No data are available on **Wytensin** dialyzability.

Dosage and Administration: Individualize dosage. A starting dose of 4 mg b.i.d. is recommended, whether used alone or with a thiazide diuretic. Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response. Maximum dose studied has been 32 mg b.i.d., but doses this high are rarely needed.

How Supplied: (guanabenz acetate) Tablets, 4 mg, bottles of 100 and 500; 8 mg and 16 mg, bottles of 100.

Revised 2/14/85

Wyeth Laboratories
Philadelphia Pa 19101

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Ad Council

TWELVE IMPECCABLE EXCUSES FOR NOT GIVING BLOOD.

"1. I think I have lumbago.
2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
5. I just got back from Monaco.
6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia."



Each one's a doozy, but we're hoping you won't use any of them. Give blood through the American Red Cross. Please, don't chicken out.

EXCUSES DON'T SAVE LIVES. BLOOD DOES.

American Red Cross

Report of Reference Committee C

Dan B. Stephens, M.D., Chairman
Teresa E. Clark, M.D., Vice Chairman

During its meeting of April 25, Reference Committee C gave careful consideration to its referred reports and resolutions. The following physicians were members of that Committee: Dan B. Stephens, Chairman, Marietta; Teresa E. Clark, Vice Chairman, Atlanta; L. C. Buchanan, Decatur; Ronald P. Roper, Marietta; Jim Lee Rogers, Rome; James P. Evans, Savannah; Irving D. Hellenga, Toccoa; Robert M. Patton, Columbus; Alvin H. Clair, Atlanta; and Robert Quattlebaum, Jr., Savannah.

GaMPAC

Beverly B. Sanders, Jr., M.D., Chairman

Believe it or not, GaMPAC in 1984-85 reached its largest membership ever. Our membership rolls for that period were 24% of total MAG membership.

That 24% is great compared to our 12% some three years ago, but can you believe that 75% of the physicians in this state do not want to be a part of the political process through GaMPAC? These figures do not lie.

1986 is an election year. Medicine has many friends who are elected officials in Georgia. There are also too many elected officials who are in no way friendly to medicine or our patients.

This election year we *have* to do everything within our power and beyond to help re-elect our friends and hopefully defeat some unfriendly legislators. To do this, it will take money and not from just 24% of the physicians in Georgia.

The major organization we will be competing with come election time is the Georgia Trial Lawyers Association. During the 1986 Georgia General Assembly, they raised between $750,000 and $1,000,000 just for advertisements statewide. In local areas such as Albany, Macon, etc., every trial lawyer wrote a $500 check just for local advertisement on television, on the radio, and in the newspaper.

One can only guess that more than that will be raised for political contributions.

We know for a fact that they have offered $30,000 to anyone who will run against the Tort Reform Sponsor Pete Robinson. We know for a fact that similar amounts have been offered to anyone who will run against our friends. In addition to this, they will probably go to any extreme to re-elect their principal supporters such as Senator Tom Allgood and others.

Now is the time for you, every Georgia physician, to put up a little to gain a lot.

GaMPAC annual dues are $150, most of which can be tax deductible. We need your participation — *YOU* need your participation for your political survival.

Recommendations:

1. The GaMPAC Board of Directors requests the MAG House of Delegates to endorse GaMPAC and encourage through whatever legal means, *all* Georgia physicians and spouses to become GaMPAC members.
2. The GaMPAC Board feels the dues structure is too low to adequately participate in the political arena, and therefore asks the MAG House of Delegates to endorse a GaMPAC dues increase to $250 beginning January 1, 1987.

House Action:

Adopted as amended:
Delete from last line of Recommendation 2: "beginning January 1, 1987," and insert in lieu thereof, "retroactive to January 1, 1986."

MAG Mutual Insurance Company

Charles D. Hollis, Jr., M.D. Chairman of the Board

A Year of Accomplishment

As I reflect back on the formation of MAG Mutual Insurance Company, I am genuinely amazed at the foresight shown by the Medical Association of Georgia in forming your insurance company.

Commercial insurance carriers, true to form, have left the market, or pulled back, taking no new business, or severely restricted the classes of physicians they are willing to insure. This is reminiscent of the actions taken by commercial carriers in the mid-1970's when medical liability insurance became unavailable in many states. It led to the formation of physician-owned mutual companies in other states and was a major factor in the formation of MAG Mutual.

In Georgia, the frequency and severity of claims increased faster in 1985 than any previous year since the Company was formed. Yet, MAG Mutual has maintained its commitment to Georgia physicians. At this

time, we are the only major carrier in the state which will insure independent new applicants. New physicians entering practice are the future of organized medicine in Georgia and MAG Mutual expresses its confidence in these young physicians by providing them with a viable market for professional liability coverage.

In several key areas, your Company turned in an excellent performance in 1985. Written premium in 1985 jumped 65% to $25.1 million from $15.2 million in 1984. This dramatic rise in premium reflected rate increases taken in late 1984 and early 1985. These rate increases were the direct result of the sharp increase in both the frequency and severity of losses which has been taking place here in Georgia. Net income rose from $268,709 in 1984 to $1,152,226 for the year just ended. It must be noted, however, that this significant increase was accomplished by realizing capital gains by selling certain of the Company's investments and not from profits generated from operations. Without this investment gain, the Company would have lost $683,739 in 1985. In other words, losses and expenses are higher than premiums.

One of the several accomplishments in 1985 we are proud of was our ability to properly manage expenses. We were able to reduce MAG Mutual's expense ratio to 7.6 in 1985, down from 10.0 in 1984. MAG Mutual's 1985 ratio is well below competition's 1985 medical liability expense ratio of 18.7%. We expect our expense ratio to drop even further in 1986 as we continue to improve our efficiency and productivity. This action contributes to our efforts to keep premium increases as small as possible.

Total assets rose 94% to $41 million in 1985, up from $21 million a year earlier. While this certainly is a dramatic jump, it must be pointed out that loss reserves for claims filed against insured doctors rose even more rapidly, from $13.4 million in 1984 to $28.2 million at year-end 1985; this represents a 111% increase. During the year we had an average of nearly 50 new claims per month filed against insureds. We added an average of $1.64 million each month to reserves for claims which have been filed, but which will not be settled or litigated for some time to come. As you may know, only 6% of losses are paid in the same year that premium is collected. Losses on 1985 premiums will not be fully paid out until at least 1995.

Progress in building all important surplus was also among our major accomplishments in 1985. MAG Mutual increased its surplus from $2.5 million at 12/31/84 to $4.0 million at 12/31/85, an increase of 60%. We achieved this increase by capturing some capital gains in our investment portfolio and by reinstituting, effective November 1, 1985, the requirement that each physician insured by MAG Mutual must become a "designated physician" with respect to at least one Surplus Certificate.

MAG Mutual expects to generate additional surplus of $1.4 million dollars in 1986 from the continued sale of Surplus Certificates. MAG Mutual's Board of Directors acted courageously and wisely in reinstituting the Surplus Certificate requirement. It is a necessary part of our continuing effort to build and expand the financial foundation of the Company, thereby enabling MAG Mutual to insure additional physicians, to increase its premium volume, and maintain a competitive market for medical liability insurance protection in Georgia.

Looking Ahead

Many of the challenges of 1985 remain with us. We have pledged to aggressively pursue improvements in the judicial climate for Georgia's physicians and we will continue to push for meaningful civil justice reform.

However, our major challenge in 1986 and beyond will be to provide a competitive professional liability

MAG Mutual
Financial Results

	'82	'83	'84	'85
Gross Written Premium	$4,200,000	$8,900,000	$15,200,000	$25,000,000
Total Admitted Assets	$5,700,000	$11,600,000	$21,200,000	$41,000,000
Total Loss Reserves	$ 900,000	$ 5,300,000	$13,300,000	$28,200,000
Expense Ratio (Expenses as a % of premium)	23.3%	15.8%	10.0%	7.6%
Net Income	$ (617,000)	$ (708,000)	$269,000	$1,152,000

MAG Mutual
Claim Activity

	*1982**	*1983*	*1984*	*1985*	*TOTAL*
Claims Reported	56	316	426	556	1,354
Claims Closed	2	69	237	282	590
Claims Still Open at Year End	54	301	490	764	764
Claims Closed With Payment	1	5	26	23	55
Average Amount Paid Claim	$15,000	$ 38,950	$ 87,600	$ 78,350	$ 120,230
Total Payment	$15,000	$194,750	$2,277,892	$4,125,261	$6,612,903
Defense Costs for All Claims	$ 2,033	$189,155	$ 640,772	$1,589,274	$2,421,234

*June through December 1982.

insurance market for the increasing number of physicians seeking coverage from MAG Mutual. In the face of other carriers' withdrawal from the state, reductions in the classes of physicians eligible for insurance, and moritoriums on new business, MAG Mutual will make every effort to insure those physicians who meet underwriting guidelines. However, we will not be able to underwrite everyone; we're simply not big enough for that, nor do we dare compromise our standards.

MAG Mutual Insurance Agency, the Company's wholly-owned subsidiary, has a real opportunity to grow and contribute to the overall profitability of the Company. As more and more of our policyholders and their employees place their business insurance, and life, health, auto and homeowners insurance coverages with the Agency, any profits generated by the Agency will help moderate increases in the liability premiums. This is especially true as the general insurance market place tightens further, and physicians look more and more to MAG Mutual and to its insurance Agency as the source of coverage for all their insurance needs.

The Company has recently created a Marketing Committee, chaired by Dr. Phil Israel of Marietta. This Committee will develop ways to involve more of our policyholders in the activities and programs of the Company. The Committee will also design new public relations and marketing programs to let our insureds and all Georgia physicians know of MAG Mutual's accomplishments in claims, underwriting, and tort reform, to name a few areas.

Now more than ever Georgia physicians know they can rely on MAG Mutual. Our challenge in 1986 will be to continue to build the financial strength necessary, based upon proper rates, to enable your Company to continue its mission to provide a competitive market for medical liability insurance for Georgia physicians.

House Action:

Received for information.

Committee on Legislation

James A. Kaufmann, M.D., Chairman

Our medical society — your Legislative Committee was more active this year than we have been since the days of reorganization in 1972.

Obviously, our major effort was on Tort Reform, and although we did not pass all we wanted, we have NO REMORSE for our efforts, our game plan and the outlook for good legislation being PASSED in either a special session or in 1987.

This committee worked with the MAG Public Relations Committee and MAG Mutual, the MAG liability insurance company, to help create the Georgia Liability Crisis Coalition which had some 72 statewide associations as members. All desired the same end result — the passage of Tort Reform legislation. Today, this Coalition is alive and will continue to strive toward liability relief.

The efforts of these committees and this staff gave over 102 civic club/medical society presentations statewide. On some days, as many as eight presentations were given. Our effort was STATEWIDE. Our effort was one of public education. Our effort began slowly and is still increasing and will *not* die until we receive Tort Reform via the legislative process.

When the MAG Board of Directors in September directed this committee to go forward, we knew we were undertaking an uphill battle with the Georgia Trial Lawyers Association. Several of their members are members of the Georgia General Assembly in power positions: Speaker of the House, Majority Leader of the Senate, members of the House and Senate Judiciary Committee, and others.

Due to the major priority issue, we were skeptical as to how all other issues of interest to MAG would fare. Would they get caught up in the Tort Reform battle? I am pleased to announce that no legislation which MAG opposed passed and, other than House Bills 1184 and 1186, we had a very successful year.

Although House Bills 1184 and 1186 did not pass our efforts were not in vain. For the first time, Georgia physicians have as allies the Georgia Business Council, county government, small & large businesses, numerous lawyers, accountants, architects, home builders, etc., and through this alliance, *we will get Tort Reform.* In the closing minutes of the 1986 session, we felt compelled to urge the legislators to pass a bill which would have a positive effect on the liability crisis.

The following is a brief recap of the Tort Reform issue and the final status of numerous other issues of interest to our members.

Tort Reform

House Bill 1184 — Attorney Contingency Fee
Did Not Pass

This bill was *never* considered by the House Judiciary Committee.

House Bill 1185 — Dismiss and Refile Rule
Passed

Awaits the Governor's signature. This bill states that after the close of the plaintiff's case, the plaintiff cannot dismiss the case.

House Bill 1186 — General Tort Reform
Did Not Pass

This original bill contained several issues:

1) Disclosure of Collateral Sources
2) Structured Settlements/Periodic Payments
3) Judicial Authority to Modify Awards
4) Cap on Punitive Damages of $250,000
5) Cap on Pain & Suffering Damages of $250,000
6) Joint and Several Liability

With *no* discussion by MAG, the business coalition, or the trial lawyers, the House Judiciary Sub-Committee and the full House Judiciary Committee passed HB 1186 on January 30 with only the issues of collateral source and judicial authority.

The House of Representatives passed this version on January 31.

The Senate Judiciary Sub-Committee altered the House version by changing the disclosure of collateral sources to mandatorily offset collateral sources by the judge to only collateral sources of Medicaid and Workers Compensation payments. They left in judicial authority to modify awards and added periodic payments, attaching a mandatory interest rate charged to the liability company. The full Senate Judiciary Committee was asked by the sub-committee to make no additional committee amendments.

When the bill went to the Senate floor, the Georgia Liability Crisis Coalition and MAG had a floor substitute offered by Senators Pierre Howard, Quillian Baldwin, Tom Coleman, nad others. This floor substitute contained:

1) Disclosure of Collateral Sources
2) Judicial Authority to Modify Awards
3) Cap on Punitive Damages
4) Structured Settlements and Periodic Payments

Senators Tom Allgood of Augusta, Roy Barnes of Mableton, and others attached several amendments to the floor substitute which even the *Atlanta Constitution* stated were ridiculous and unworthy of those persons playing with an issue so vital to millions of Georgians. Had these unacceptable amendments *not* been attached, there was the possibility that the House of Representatives would have voted for the Senate floor substitute; however, because of these amendments, there had to be a conference committee — three appointed by House Speaker Tom Murphy (Representatives Charles Thomas of Temple, Denmark Groover of Macon, and Pete Robinson of Columbus) and three appointed by Lt. Governor Zell Miller (Senators Pierre Howard of Decatur, Tom Coleman of Savannah, and Quillian Baldwin of LaGrange).

This conference committee met four times and discussed in general terms the issues at hand. Everyone in attendance sensed an agreement on all the issues except joint and several liability and pain and suffering caps. The Senators presented to the House conferees three typed reports, all of which were an attempt to incorporate as much of the House ideas as possible.

The House responded with one typed version on the last day of the session around 5:15 p.m. The Senate conferees wanted very badly for the bill to include a structured verdict/ periodic payment proposal. While this was being discussed, the Legislature adjourned at 6:01 p.m. Hence, HB 1186 did not pass.

The following is an excerpt from a March 10 editorial by Bill Shipp in the *Atlanta Constitution:*

> "Tort reform. A House-Senate conference committee had worked on this bill for four days without progress. The House conferees would not budge from the House position, which was, in fact, the position of plaintiffs' trial lawyers. Any compromise that might have emerged from a late-hour legislative session would have been a nightmarish mishmash."

In our opinion, the House or Senate conferees are not to blame for causing the deadlock.

In a March 11 article, Frederick Allen, Political Editor of the *Atlanta Constitution* included the following excerpt:

> "When the gavels fell at 6:01 p.m. Friday, for example, the House and Senate were tantalizingly close to agreement on two of the main bills of the session, tort-law reform and restrictions on computerized telephone solicitations.
>
> The six conferees on tort-law reform were met in a third-floor office and had reached a compromise in principle that would have imposed several sensible changes in the way the courts treat personal injury suits.
>
> At that precise moment, Senate Majority Leader Tom Allgood, an Augusta lawyer who staunchly opposed all efforts at tort-law reform, was lobbying his colleagues on the Senate floor for an early adjournment."

We here at MAG totally concur with both of these articles.

There is much talk today about calling a "Special Session" for Tort Reform. Governor Harris has indicated NO. If 3/5 of the elected legislators, 34 Senators and 108 Representatives, by letter, request a special session, then there *will* be a special session on Tort Reform. Ask your Senators and Representatives how they feel on this Special Session issue.

Special Commendations

Many legislators supported our efforts and wanted badly to pass a major tort reform package. The following are just a few to whom we owe a special thanks. We hope you will write and thank each of them for their extra special efforts and hard work:

Rep. Pete Robinson, 3334 Coweta Drive, Columbus, GA 31907
Rep. Denmark Groover, P.O. Box 755, Macon, GA 31202
Rep. Tom Buck, P.O. Box 196, Columbus, GA 31902
Rep. Crawford Ware, P.O. Box 305, Hogansville, GA 30230
Rep. Joe Wood, P.O. Drawer 1417, Gainesville, GA 30503
Rep. Dean Auten, 628 King Cotton Row, Brunswick, GA 31520
Rep. Bill Lee, 5325 Hillside Drive, Forest Park, GA 30050
Rep. Tommy Chambless, P.O. Box 2008, Albany, GA 31702
Sen. Pierre Howard, 500 Fidelity National Bank Building, Decatur, GA 30030
Sen. Tom Coleman, P.O. Box 22398, Savannah, GA 31403
Sen. Quillian Baldwin, P.O. Box 1364, LaGrange, GA 30241
Sen. Culver Kidd, P.O. Box 370, Milledgeville, GA 31061
Sen. Terrell Starr, 4766 Tanglewood Lane, Forest Park, GA 30050
Sen. Paul Broun, 165 Pulaski Street, Athens, GA 30610

House Bill 156 — Chiropractic Scope of Practice
Passed

Our suggested compromise of 1985 passed this year. HB 156 permits chiropractors to use ultrasound, galvanism, diathermy, and hot and cold treatments. HB 156 also has language making chiropractors liable to the same degree as a medical doctor for their actions, such as missing a tumor on an x-ray, etc.

House Bill 180 — Physical Therapists
Did Not Pass

This proposal was to delete the word "consultation" in their practice act. If this had passed, it would have permitted physical therapists to diagnose and initiate physical therapy for any patient, without any consultation or communication with an M.D.

House Bill 187 — Radiologic Technologists
Did Not Pass

This was a proposal to create certification of x-ray technologists under the Board of Medical Examiners. It had a grandfather clause of three years. There would be established a two-tier certification process, one for full x-ray technologists and one for a limited x-ray technologist.

House Bill 310 — Abortion Notification
Did Not Pass

The last night of the session, HB 310 passed the Senate in a different version than the House, and the Legislature adjourned before the House could consider the Senate version. HB 310 would have mandated the physician, prior to performing an abortion on a minor, attempt to telephone the parent or parents at least twice. If the parent(s) could not be reached, a registered letter would be sent to the parent(s) that day. Failure to talk with the parent did not prohibit the abortion from taking place the same day. Thus, HB 310 would have been a notification to the parents of the procedure having already been performed.

House Bill 476 — Board of Massage Therapists
Did Not Pass

Would have created a new licensure board for massage therapists specifying who and what a therapist could treat.

House Bill 586 — Nutrition — Handicapped Children
Did Not Pass

This proposal would have made it illegal for any parent, guardian, or other person responsible for a handicapped child to deprive or permit another to deprive said handicapped child of nutrition or hydration which is necessary to sustain life.

House Bill 811 — Rate Review
Did Not Pass

This proposal was to create a Rate Review Commission which would ultimately establish fee schedules for hospitals, physicians, and other persons and institutions in the medical area.

House Bill 850 — Sunrise Legislation
Passed

This creates a commission of State Department Heads and legislators to review all proposed legislation creating any new licensure boards. Said commission would then make their recommendation to the General Assembly relative to the issue.

House Bill 962 — Confidential Communication
Passed

This proposal originally would have deleted the psychiatric privilege status; however, an amendment deleted that section. The remainder of the bill states that "No physician shall be required to release any medical information concerning a patient except to DHR or where authorized by law, statute, or lawful regulation."

House Bill 972 — RX Nutritional Deficiencies
Did Not Pass

This was an attempt to require a physician who prescribed *any* drug to discuss the potential for nutritional deficiencies which might result from the use of the drug with the patient or the hospital, nursing home, etc. The physician would also be required to prescribe nutritional supplements to offset potential nutritional deficiencies.

House Bill 1121 — Non-Medical Health Care Board
Did Not Pass

Would have created a new licensure board for all persons who are not currently licensed but purport to perform health/medical procedures on patients.

House Bill 1139 — Electrologists Board
Did Not Pass

Would have created a new licensure board for persons who do electrolysis, stating that no one other than those licensed by this board could do electrolysis.

House Bill 1146 — Frivolous Law Suits
Passed

A compromise was reached between theoriginal HB 1146, Speaker Murphy's proposal, and SB 434, Lt. Gov. Zell Miller's loser pay proposal. The passed version permits the judge to assess to the loser and/or the loser's attorney, court costs for filing a frivolous law suit.

House Bill 1159 — Drugs: Recordkeeping
Passed

This proposal states that any practitioner who dispenses drugs, other than samples, administered agents and compounded agents, shall notify their respective licensure board, at the time of their license renewal, that they dispense (sell) pharmaceutical agents.

House Bill 1160 — Drug Samples: Repeal
Did Not Pass

HB 1160 would have made it illegal to use sample drugs.

House Bill 1187 — AIDS
Did Not Pass

This was an attempt to classify AIDS as a venereal disease, thus making it reportable by the physician and DHR as are other venereal diseases.

House Bill 1285 — Data Clearinghouse
Did Not Pass

This proposal would have given the State Health Planning and Development Agency (SHPDA), the Certificate of Need agency, the authority to *demand* from every M.D., every hospital, nursing home, home health care agency, etc., a list of *all* their charges, admissions, dismissals, disposition of cases, etc. Failure of an M.D. to comply would have resulted in a $500/day fine *and* automatic license revocation.

A version of HB 1285 passed the House and was pending vote by the Senate when they adjourned at 6:01 p.m.

House Bill 1316 — Peer Review. Medical Board
Passed

Will require the Composite State Board of Medical Examiners investigate any physician who had successfully been sued twice or has had one verdict against him in excess of $50,000.

House Bill 1329 — Coroner Inquest
Passed

Requires that when a coroner conducts an inquest into the death of an individual, he shall be authorized to issue subpoenas to compel production of any books, records, or papers.

House Bill 1334 — Anatomical Gifts
Passed

Permits any person who is 18 or older, at the time of hospital admission, to inform the hospital of their desire to donate all or parts of his body. The hospital administrator would provide appropriate forms to meet the anatomical gift laws of Georgia.

House Bill 1352 — Living Wills
Passed

This bill alters Georgia's living will statute by permitting the legal form in the original law to now state that the form shall be *substantially* the same as the mandated form.

House Bill 1497 — Midwives: Hospital Privileges
Did Not Pass

Would have permitted midwives the right to have hospital privileges where no obstetrician or family practitioner is on staff who routinely delivers babies.

House Bill 1524 — Blood Donation
Did Not Pass

Would have permitted a person to specifically donate their blood, designated to be used on their child, etc., but only if they had been a prior blood donor to their local blood bank.

House Bill 1591 — SHPDA: Certificate of Need

HB 1591 DID NOT PASS; however, its contents *DID PASS* as an amendment to Senate Bill 56. HB 1591 states that the State Health Planning and Development Agency could not overrule the appeal of the State Health Coordinating Council in the ruling of a Certificate of Need application.

House Bill 1818 — Indigent Defense
Did Not Pass

HB 1818 passed the House but was referred back to committee in the Senate. The House version stated that neither a lawyer nor a physician could be sued for malpractice if they represented a client or treated a patient for whom they were only paid by federal, state or local monies.

House Resolution 716 — Indigent Health Care Task Force
Passed

Will create a special task force to study the issue of indigent care in Georgia and recommend a funding source to pay for the treatment of Georgia's indigent.

Senate Bill 32 — Respiratory Care
Passed

Creates a certification process for respiratory therapists under the Composite State Board of Medical Examiners. SB 32 clearly states that these certified respiratory therapists will work under the direct supervision of an M.D.

Senate Bill 56 — Sale of Hospitals — Indigent Care
Passed

SB 56 requires that whenever a public hospital is sold, the net proceeds (amount left after the bonds are paid off) shall be set aside in an interest-bearing trust account and used solely for the purpose of indigent care.

SB 56 was also amended (as HB 1591) to state that when the State Health Planning and Development Agency, the Certificate of Need agency, had ruled and said ruling is overturned, SHPDA could not then override that decision.

Senate Bill 128 — Informed Consent
Did Not Pass

Would have mandated that a written informed consent form be signed prior to any surgical procedure. Said proposal would have mandated the form include all risks, alternatives, and side effects of the proposed procedure.

Senate Bill 151 — Motorcycle Helmet: Repeal
Did Not Pass

Would have repealed the law which mandates all motorcycle riders to wear helmets.

Senate Bill 318 — Mental Health: Out-Patient Treatment
Passed

Establishes mechanisms by which mental health patients can be treated on an on-going, out-patient basis rather than be institutionalized, dismissed, and reinstitutionalized.

Senate Bill 381 — Nurses: Mandatory Insurance
Did Not Pass

Would have mandated third-party reimbursement, including commercial insurers, Blue Cross/Blue Shield, Life of Georgia, Medicaid, Medicare, etc., for the services of R.N.'s.

Senate Bill 403 — Clinical Laboratory Technicians
Did Not Pass

Reference Committee C



ne to address the House are (left to right) Drs. Ken Goldman, of Columbus; o S. Moreno, of East Point; and F. William Dowda, of Atlanta.



While orthopedist Robert Wells, M.D., of Atlanta, addresses the House, Dr. William Logan, Jr., (middle) converses with Dr. Charles Underwood of Marietta.

Would have created a new licensure board for the purpose of licensing persons who are laboratory technicians. This proposal would have limited all laboratory work, such as drawing blood, urine testing, etc., to only those persons licensed by this board.

Senate Bill 459 — Minors: Guardian Ad Litem
Statute of Limitations
Did Not Pass

The original bill provided that a minor be appointed a guardian ad litem. Many had planned to amend this to establish a statute of limitations for minors at age 6 plus 2 years. However, the House Judiciary Committee referred this to a study committee.

Senate Bill 497 — Medical Board
Did Not Pass

SB 497 passed the Senate, but did not pass the House. This would have taken the Medical Board out from under the auspices of the Joint Secretary of the State Examining Boards. It would still be under the Secretary of State, but would be more independent and thus more accountable for the funds necessary to run the Board and have a more direct relationship with the investigators assigned to the Board and the Attorney General's Office, thus making the Board more responsible.

Senate Bill 542 — Informed Consent: Breast Cancer
Did Not Pass

This bill would have mandated that prior to breast cancer biopsy or surgery, the patient sign a consent form with two options: Option A would permit biopsy *only;* Option B would permit surgery.

Senate Resolutions

The following resolutions were passed creating study committees on the subject matters:

SR314 Long-Term Care Insurance
SR 382 Medical Malpractice
SR 394 Health Care Supply & Finance
SR 415 Alzheimer's Disease
SR 421 Medical Professions Study Committee

The above are some of the major medical issues that were pending before the 1986 Georgia General Assembly. The total number of medical bills were 165, all of which were monitored daily by MAG.

It is obvious that the legislative agenda will be dominated by medical related issues. Tort reform will be a major part of our agenda until it is adequately addressed — AVAILABILITY AND AFFORDABILITY.

MAG had a mass visitation day at the Capitol which can be viewed as a success. Beyond this, there were *very* few physicians who came to the Capitol this year. Our Physician Involvement Program (PIP) had fewer participants than in any previous year, yet the issues were more in number and greater in significance.

What can we do in order for you, the Georgia physician, to take part in the process that is and will continue to control your practice, your patients' access to quality care, your income, and your independence to practice quality medical care? This is the question which we *must* answer and answer soon for our time is running out.

Recommendations

1. That MAG continue its Physician Involvement Program with added emphasis so that *at least* ten (10) physicians will participate daily.
2. That MAG encourage all of its members to join GaMPAC.
3. That MAG continue its Tort Reform campaign via an assessment to all MAG members with monies being directed through the MAG Executive Committee.

4. That MAG continue to be an active member of the Georgia Liability Crisis Coalition.
5. That we commend the entire MAG staff for being a part of this year's Tort Reform Campaign. Even though some of the staff were not directly involved, they took over additional duties in order for others to devote time to our campaign, which was excellent and our victory only postponed to 1987.
6. That the following MAG members be commended for going above and beyond the call of duty on behalf of our Tort Reform effort of 1986:

Dr. Ernie Fokes — As Chairman of the MAG Ad Hoc Committee on Medical Liability, he and his committee met on numerous occasions and worked closely with the MAG Public Relations Committee, the MAG Legislative Committee, and the MAG Executive Committee. Dr. Fokes dedicated himself to this Tort Reform effort. He volunteered his time and gave 19 civic club presentations throughout the state on our behalf. Dr. Fokes deserves our sincere thanks and gratitude.

Dr. William D. Logan, Jr. — Dr. Logan, our President, devoted untold hours to this process, not only as a part of his regular duties as President of the Medical Association of Georgia, but by attending numerous other meetings, and with his many visits to the Capitol on your behalf.

Dr. Ralph Tillman — Dr. Tillman spent more time at the Capitol working for you than did most other physicians put together. He attended almost all of the committee hearings (House, Senate, and Conference Committees), on Tort Reform, in addition to covering other committee meetings while staff and others were working on additional issues. Thank you, Dr. Tillman.

Dr. John Watson, Jr. — Dr. Watson participated in numerous newspaper, radio, and television dialogues with representatives of the Georgia Trial Lawyers. In so doing, he represented the medical profession in an outstanding fashion.

Dr. Jeff Nugent — As chairman of the MAG Public Relations Committee, he was a motivating force behind MAG's Tort Reform effort. The many hours he spent either in MAG committee meetings, or private meetings with MAG leadership and staff, helped coordinate and direct our efforts.



(L. to R.) Dent W. Purcell, M.D., and H. Duane Blair.



James Kaufmann, M.D., of Atlanta, is at the microphone addressing the House. Behind him is Joseph Bailey, M.D., of Augusta. Seated left to right are Jack Raines, M.D., of Columbus, and Charles Lanford, M.D., of Macon.



MAG's Treasurer, Cyler Garner, M.D.

House Action:

Adopted as amended, by adding to the sixth recommendation the names of two physicians whose efforts are to be commended:

"*Dr. Charles Hollis* — As President of MAG Mutual, Dr. Hollis has been a prime mover in the tort reform effort from the outset. He is one of medicine's most effective spokesmen and has worked tirelessly toward our objectives.

"*Dr. James Kaufman* — As chairman of the Legislative Committee, Dr. Kaufmann modestly omitted mention of his many contributions. However, the House would be remiss if it did not recognize Dr. Kaufmann's invaluable role in MAG's legislative activities."

Ad Hoc Committee on Diversion of Legitimate Prescription Drugs

Milton I. Johnson, M.D.

This committee held three lengthy meetings since it was appointed several months ago.

Our first meeting was held on October 5, 1985, which was an organizational meeting. It was decided to invite a number of knowledgeable people to our next meeting which was held on 11/9/85. This meeting was attended by Mr. Jerry Cherkas of Georgia Drugs and Narcotics Bureau; Mr. Robbie Hamrick, Georgia Bureau of Investigation; Mr. Herman Griner of the Atlanta Police Department; Mr. Tommy Cook of the Georgia Pharmaceutical Association; Mr. Andrew Watry of the Composite State Board of Medical Examiners; Mr. Bob Williamson of the Drug Enforcement Administration, Atlanta; Mr. Jimmy Davis of GBI Drug Enforcement Section; Mr. T. Tom Gitchel, Drug Enforcement Administration, Washington, D.C.; and Charlotte A. Johnson, attorney with the Drug Enforcement Administration from Washington, D.C.

The background of the problem of diversion of prescription drugs into illicit channels was addressed by each of those named above, with each giving the committee the benefit of his or her knowledge and experience about this real problem.

It was the consensus of opinion that the so-called triplicate prescription blank program should be instituted in an attempt to control this problem. A subcommittee was appointed to draft legislation to institute this program. This subcommittee met on 12/19/85 and submitted the language for a bill.

The full committee met again on 1/4/86 and examined the bill in detail and recommended that the bill be presented to the Board of Directors for action.

A second recommendation of the committee was that MAG reaffirm its support of establishment of a Governor's Task Force on Drug Abuse.

Your committee chairman and William H. Whaley, M.D., presented these recommendations to the Board of Directors on 1/11/86. A lengthy discussion was held and the Board voted to table the recommendations of the committee regarding triplicate prescriptions and reiterated its support of establishing a Governor's Task Force on Drug Abuse.

This concludes the final report of the MAG Ad Hoc Committee on Diversion of Prescription Drugs.

House Action:

Received for information.

Resolution 1

Surcharge Proposal by St. Paul

RESOLVED, that MAG express its opposition to and grave concern over the surcharge proposal to the appropriate people including the Insurance Commissioner and St. Paul, and be it further

RESOLVED, that MAG work with MAG Mutual Insurance Company to help them formulate a plan to offer a fair and sound alternative to St. Paul's surcharge plan, and, be it further

RESOLVED, that we inform our membership in a timely manner of MAG's position and progress on the surcharge proposal.

House Action:

Adopted.

Resolution 3

Tort Reform and Balanced National Budget

Hall County Medical Society

RESOLVED, that the physicians of the Medical Association of Georgia now request that our congressmen fulfill their part of this obligation and balance the budget, and be it further

RESOLVED, that since further financial cuts and restraints are anticipated, congressmen give physicians some assistance in stabilizing physician expenses by adapting reasonable nationwide tort reform legislation.

House Action:

Filed.

Resolution 11

Seat Belt Legislation

DeKalb Medical Society, Inc.

RESOLVED, that the MAG Legislative Committee establish as one of its highest priorities, the passage of seat belt legislation in the 1987 General Assembly.

House Action:

The following substitute Resolution was adopted in lieu of this Resolution and Resolution 18:

"RESOLVED, that MAG reiterate its position in favor of mandatory seat belt legislation and work toward passage of such legislation in the 1987 General Assembly."

Resolution 18

Seat Belt Legislation

Joe B. Massey, M.D., Delegate Medical Association of Atlanta

RESOLVED, that the Medical Association of Georgia study existing state laws mandating required seat belt usage and adopt a stance which favors sensible mandatory seat belt laws in Georgia.

House Action:

See Resolution 11.

Resolution 19

Donor Insemination

Joe B. Massey, M.D., Delegate Medical Association of Atlanta

RESOLVED, that state law be modified to state that donor insemi-

nation may be performed by a physician or by a registered nurse, physicians assistant or reproductive biologist under the written and dated order of a physician.

House Action:

Adopted as amended:
"RESOLVED, that MAG seek legislation to amend state law so that donor insemination may be performed by a physician or by his designee under the written and dated order of a physician."

Resolution 21

Tort Reform Legislation

Laurens County Medical Society

RESOLVED, that the Medical Association of Georgia strongly recommend to MAG Mutual and the liability insurance industry in general that they develop some clear and concise data illustrating the effect that such legislation has had in other states where enacted and the effect that it would reasonably be expected to have in Georgia if adopted, and this information be made available as soon as possible to members of the Medical Association of Georgia and to the state legislators.

House Action:

Adopted.

Resolution 22

Tort Reform

DeKalb Medical Society, Inc.

RESOLVED, that MAG establish tort reform as its highest priority, and be it further

RESOLVED, that MAG assess each member $500 to finance this program over the coming year, and be it further

RESOLVED, that MAG shelve all activity on its HMO/IPA for one year or until meaningful tort reform has been enacted in order that we can devote maximum energy and resources to this urgent cause.

House Action:

Resolve 1: Adopted.
Resolve 2: See Budget Report of Reference Committee F.
Resolve 3: See Report of Reference Committee B.

Resolution 24

Attorney General's Ruling on Delegation of Duties

DeKalb Medical Society, Inc.

RESOLVED, that the House of Delegates of the Medical Association of Georgia request that the Medical Association of Georgia challenge this ruling of the Attorney General on "OCGA S 43-34-26b 9" by appropriate legal means in the most expedient manner possible to preserve for physicians the right to act in behalf of their patients in the best possible professional manner.

House Action:

Adopted as amended:
"RESOLVED, that MAG seek a revision of this ruling by the Attorney General on 'O.C.G.A. 43-34-26-b 9' by appropriate means in the most expedient manner possible to preserve for physicians the right to act in behalf of their patients in the best professional manner."

Resolution 28

Diversion of Legitimate Schedule II Narcotic Drugs

Medical Association of Atlanta/ William H. Whaley, MD, Member, Ad Hoc Committee on Diversion of Legitimate Prescription Drugs

RESOLVED, that the 1986 House of Delegates go on record as requesting that the Board of Directors of the Medical Association of Georgia, the Executive Committee of the Medical Association of Georgia, and the Legislative Committee of the Medical Association of Georgia work with the GBI and other interested groups to submit and work toward passage of the drafted Bill.

House Action:

Adopted as amended:
"RESOLVED, that the Medical Association of Georgia work with the GBI and other interested groups to submit and work toward passage of a mutually acceptable bill."

Attachments: Available from MAG Headquarters, Executive Director's office.

Resolution 30

National Tort Reform Legislation

DeKalb Medical Society, Inc.

RESOLVED, that MAG inform the members of the House of Representatives and Senate from Georgia, our delegation to the AMA and the appropriate AMPAC representatives of the failure of the General Assembly to enact meaningful tort reform and urge each member of Congress to support such legislation on the national level.

House Action:

Adopted.

Resolution 32

State Automobile Safety Inspection

DeKalb Medical Society, Inc.

RESOLVED, that the MAG urge the General Assembly to enact appropriate legislation to establish an automobile safety inspection program under the aegis of the State Department of Safety.

House Action:

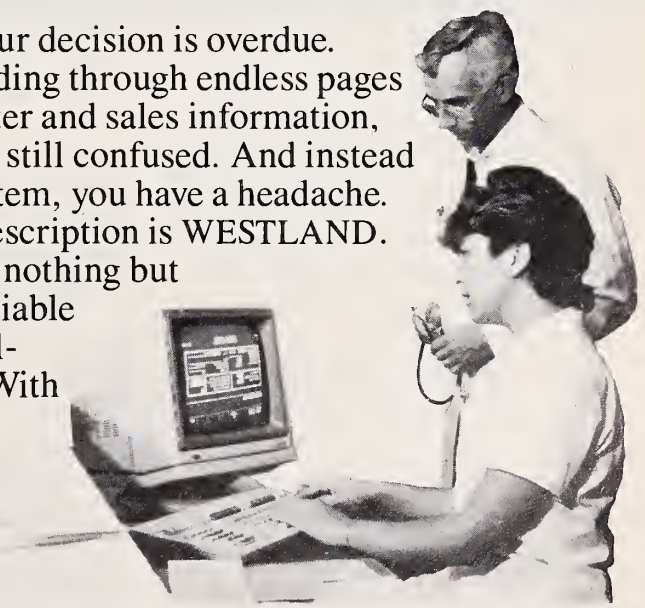
Not adopted.

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WESTLAND MEDICAL SYSTEMS

Report of Reference Committee D

J. Moultrie Lee, M.D., Chairman

L. E. Brown, M.D., Vice-Chairman





Members of Reference Committee D.

During its meeting of April 25, Reference Committee D gave careful consideration to its referred reports and resolutions. The following physicians were members of that Committee: LaMar S. McGinnis, Jr., Harry Porter, Jr., Joel D. Todino, Chappell A. Collins, Jr., Bruce C. Newsom, Bob G. Lanier and Richard W. Cohen.

Cancer Committee

LaMar S. McGinnis, Jr., M.D., Chairman

The requested, clarifying charge to the Cancer Committee, as approved by the 1985 House of Delegates, has been received; and at the Cancer Committee meeting on February 2, 1986, the charge was reviewed and accepted.

The committee noted that the priority for funding of the community-based Cancer Control Program has been advanced in the DHR ranking from No. 31 to No. 18, through efforts by committee members, the Georgia Division of the American Cancer Society, and others. However, funding of the program remains in serious doubt.

The committee noted the accomplishments and failures of the Central State Registry since MAG gained the contract in 1974; also noting that the Central Registry dates back to 1937, with 119,000 cases included in the data base and with 35 hospitals participating in the program. Recent data produced by the Registry was reviewed, and duplication of efforts for the metro-Atlanta area by SEER and the Central Registry was noted. After much discussion, it was apparent that our Central Registry has suffered from lack of identity, purpose, and most especially from underfunding; and that we do not have a reliable, population-based Central Registry in our state, producing reliable data, on a regular basis, for utilization for state health planners, the medical community, etc.

The committee discussed the *Atlanta Weekly* article of December, 1985, entitled "A Cancer Prognosis" and complimented the American Cancer Society and Doctor Charles Huguley for meeting with the editor of the *Atlanta Journal-Constitution* and subsequently providing a positive article in response.

The booklet, "About Breast Cancer," produced by the Composite State Board of Medical Examiners, was reviewed. The committee notes that although the MAG Cancer Committee is credited with coproducing the booklet, that in fact committee suggestions regarding the formulation of the booklet were largely ignored. It was also brought to our attention that an effort is being made in the current legislature to change the law and require that all persons *suspected* of having breast cancer be furnished with a copy of the booklet. The present law suggests that all patients *diagnosed* as having breast cancer be furnished the booklet.

It was noted that during the last year the Georgia Cancer Registry has produced attractive brochures for dis-

tribution on "Georgia Hospital Cancer Program" and on "The Hospital Tumor Registry," and had been a sponsor of a one-day, multi-disciplinary workshop program on "Cancer Care in Community Hospitals."

It was with regret that the committee noted the resignation of Ms. Patty Winters as Director of the Georgia Cancer Registry. Her long service and contributions were noted, and we wished her well in her new position as Director of the Jernigan Cancer Center, University Hospital, Augusta.

Recommendations:

1. That MAG continue legislative support for adequate funding for the community-based Cancer Control Program.
2. That the MAG through its Cancer Committee join with the Georgia Division of the American Cancer Society and the Cancer Control Department of DHR in a concentrated effort to solve our Central Registry problem and to obtain adequate funding for a meaningful Central Registry.
3. That MAG continue, at least for another year (86-87 FY), as contractee for the Georgia Cancer Registry, and that supervision of the Registry be under the Cancer Committee with appropriate staff.
4. That MAG, through the county medical societies, continue to keep physicians advised regarding legal requirements for the booklet, "About Breast Cancer."

The Chairman wishes to thank committee members and staff for their contributions and support during the year.

House Action:

Recommendation 1: Adopted as amended: That MAG direct its Council on Legislation to obtain, as one of its top priorities, an increase of state funding for the Community-based Cancer Control Program — a comprehensive program of cancer detection, education and prevention through 21 hospitals statewide.

Recommendation 2: Adopted.

Recommendation 3: Adopted as amended: That the MAG continue, at least for another year (86-87 FY), as contractee for the Georgia Cancer Registry, provided there is sufficient funding from sources outside of MAG; and that supervision of the Registry be under the Cancer Committee with appropriate staff.

Recommendation 4: Adopted as amended: That the MAG, through our component county medical societies, advise physicians regarding requirements for the distribution of the booklet, "About Breast Cancer."

Resolution 2

Cobb County Medical Society Adolescent Urine Drug Screen Program

Cobb County Medical Society

RESOLVED, that the Medical Association of Georgia endorse the Cobb County Society's Adolescent Urine Drug Screening Program, and, be it further

RESOLVED, that the Medical Association of Georgia promote this program to other Georgia medical societies by encouraging other medical societies to set up similar programs within their own counties. Thus parents outside Cobb County can have easier access to urine drug screening for their children and adolescents so as to more easily identify youthful drug abusers so that appropriate preventative and treatment measures can be initiated, and, be it further

RESOLVED, that the Medical Association of Georgia encourage all physicians in the State of Georgia to be alert to the possibility of adolescent drug abuse and to include modified urine drug screens as part of routine physical examinations of adolescents whenever appropriate.

House Action:

Adopted the first RESOLVE.

Adopted the second RESOLVE *as amended:* That the Medical Association of Georgia promote the urine drug screening program to its other component county medical societies and encourage each society to set up a similar program.

Adopted the third RESOLVE *as amended:* That the Medical Association of Georgia encourage all physicians in the State of Georgia to be alert to the possibility of adolescent drug abuse and to conduct modified urine drug screens whenever appropriate.

Resolution 7

Memorial To H. Hilt Hammett, Jr., M.D.

William D. Logan, Jr., M.D.

RESOLVED, that the officers and members of the Medical Association of Georgia, through the House of Delegates, express their heartfelt sympathy to the family of Dr. Hilt Hammett for their loss, and express as well the sincerest admiration and gratitude for the life and service of H. Hilt Hammett, M.D. — friend, colleague, and leader to us all.

House Action:

Adopted.

Resolution 10

Use of Steroids by High School Athletes

DeKalb Medical Society, Inc.

RESOLVED, that MAG inform all school systems of the harmful side affects of the use of steroids through the distribution of printed materials and/or seminars conducted for athletes and coaches.

House Action:

Adopted *as amended:* That the MAG, through its Sports Medicine Committee, inform all Georgia junior high and high schools of the dangerous side effects of the use of steroids through the distribution of printed

materials and/or seminars conducted for athletes, coaches and parents. Also, that the *MAG Sports Medicine Newsletter* be disseminated to its component county medical societies, and promoted as a useful source of information both to physicians and the public.

Resolution 17

Liability Insurance Crisis

DeKalb Medical Society, Inc.

RESOLVED, that the MAG Executive Committee and/or the Board of Directors be instructed to explore means wherein the MAG and MAG-Auxiliary can develop *Support Groups* for those physicians and families during the time when a physician is involved in a malpractice lawsuit, the most unpredictable and stressful times of their lives.

House Action:

Adopted *as amended:* That the MAG be instructed to explore means wherein the MAG and MAG Auxiliary can develop *Support Groups* for those physicians and families during the time when a physician is involved in a malpractice suit.

Resolution 27

Commendation of Harrison L. Rogers, Jr., M.D.

C. Emory Bohler, M.D.

RESOLVED, that the Medical Association of Georgia commend Harrison L. Rogers, Jr., M.D. for being a credit to the physicians of Georgia and the nation.

House Action:

Adopted *as amended:* That the Medical Association of Georgia highly commend Harrison L. Rogers, Jr., M.D., for his service and leadership to the physicians of Georgia and the nation.

Resolution 31

Verification of Credentials

DeKalb Medical Society, Inc.

RESOLVED, that the MAG delegation to the American Medical Association introduce an appropriate resolution to establish the AMA as a definitive clearing house for verification of physicians' credentials.

House Action:

Adopted *as amended.* That the MAG delegation to the American Medical Association introduce a resolution commending the AMA for maintaining its Physician Profile as a source of verified data on physicians' credentials, and directing the AMA to better inform hospital medical staffs and county medical societies of the availability of this valuable information.

Resolution 33

Economics of Medicine

Hospital Medical Staff Section

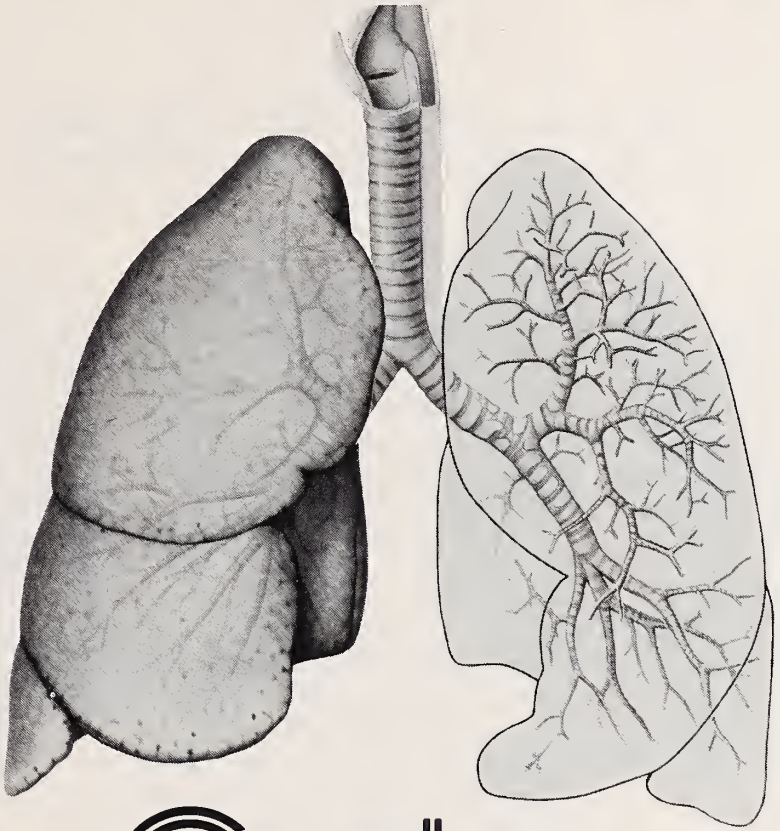
RESOLVED, that the HMSS develop educational programs on the economics of medicine for presentation to hospital medical staffs, and be it further

RESOLVED, that the HMSS disseminate a newsletter on a timely periodical basis to include current information on economics and other issues of concern to hospital medical staffs.

House Action:

Adopted: That the Medical Association of Georgia conduct a thorough examination of the purposes of its Hospital Medical Staff Section, and the Section's effectiveness in fulfilling those purposes, with a formal report to be submitted to the MAG House of Delegates in 1987.

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250-mg Pulvules® t.i.d. offers effectiveness against the major causes of bacterial bronchitis

Haemophilus influenzae, H influenzae, Streptococcus pneumoniae, Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor® is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor® (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly)

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Report of Reference Committee F

James H. Sullivan, M.D., Chairman
H. Duane Blair, M.D., Vice Chairman

During its meeting of April 25, Reference Committee F gave careful consideration to its referred reports and resolutions. The following physicians were members of that Committee: James H. Sullivan, Chairman, Columbus; H. Duane Blair, Vice Chairman, Decatur; C. Emory Johnson, Macon; Gwynne T. Brunt, Jr., Atlanta; William E. Holladay, Jr., Marietta; Frank F. Middleton, III, Albany; John I. Dickinson, Rome; and Dent W. Purcell, Savannah.



Members of Reference Committee F.

Treasurer

Cyler D. Garner, M.D.

In my Treasurer's report last year, I indicated financial results for the year ended May 31, 1985 would provide a small surplus notwithstanding the budgeted deficit of $123,783. This small surplus was important in that it signified a restructuring of MAG's financial position and represented a giant step toward fulfilling the organizational goals we set upon taking office.

At that time, I pledged to you that we would continue in the same mode insuring that your membership dues would be spent productively. I am happy to report that we will end this fiscal year with an excess of *revenue* over expense from regular operations of approximately $200,000. This is in excess of the budgeted surplus from regular operations of $116,062 approved by the House of Delegates.

Now that we are beginning to rebuild MAG's cash reserves, I want to express the importance of maintaining this impetus. Never before has organized medicine faced so many threats to those aspects of medical care to which we are dedicated.

In addition to maintaining "routine" operations (Journal, Newsletter, membership updates, continuing medical education, Risk Management Seminars, visits to county medical societies and the like) your Association must increase its already substantial efforts in such areas as: tort reform; legislative matters affecting a broad spectrum of our medical practice; alternative delivery systems for competing effectively with corporate medicine; public relations to improve the public's image of physicians; and assuring availability of malpractice insurance. And, we must continue to become involved in new areas of importance to our membership.

MAG must maintain cash reserves to respond quickly and decisively when "threats" or opportunities arise. Fortunately, as a result of regular operations and dues assessments collected during this year, MAG has moved closer to acquiring these needed reserves.

This year MAG spent approximately $190,000 in direct expenses related to tort reform activities. Additionally, significant staff time was devoted to this project. Press coverage, support of local public service organizations and support of business groups were important to our campaign. While we did not achieve our ultimate objective, the ground work has been established for an effective campaign in the coming year.

The Trial Lawyers Association raised substantially more funds than MAG. However, we believe our expenditures will prove more effective in the long run. We must continue to expand MAG's efforts as we prepare for the 1987 General Assembly.

Additionally, some $560,000 was spent to fulfill the 1985 House mandate to implement an alternative delivery system designed to give Georgia physicians a say in the way health care is delivered in the state. The Georgia Health Network is well under way and is now a major force in the marketplace insuring true competition. I wish to point out that MAG has been repaid every penny spent on this program including staff time devoted to this project, all direct and indirect costs, and the cost of the special session of the House of Delegates in October 1984.

Looking at the more routine aspects of MAG operations we continue to realign staff to provide the necessary expertise to meet our members' needs. We will finally dispose of obsolete computer equipment which has inflated our computer budget. Disposal of this equipment will result in a reported extraordinary loss of approximately $105,000 this year. Much of this loss will be a "paper" loss; however, it will save MAG some $75,000 to $85,000 per year in operating costs. As last year, your Leadership will continue to promote the efficiency of MAG operations.

Last year, the Finance Committee

submitted a recommendation that MAG perform billing for all county medical societies. This recommendation was in view of the fact that *one* county medical society in particular did not remit dues collections to MAG within the prescribed period. This year I want to thank those counties — Bibb, Georgia Medical Society, DeKalb, Muscogee and Cobb — who perform billings within policy guidelines.

Unfortunately, the Medical Association of Atlanta continues to be delinquent in remitting dues collections to MAG. To be fair to all county medical societies, the Finance Committee is recommending that county medical societies who perform their own billing and do not remit dues within the prescribed 30 days will be subject to an interest penalty (based upon the three month Treasury Bill rate + 3%) on unpaid funds. While MAA has assured the Finance Committee that this will not continue, we need an incentive to promote timely dues remittances.

Finance Committee recommendations for 1987 do not require a regular dues increase. In fact, we expect an operating surplus of approximately $50,000. In view of the expansion of MAG's tort reform effort, the Finance Committee is recommending a $100 dues assessment in July, 1986 (members paying reduced rates because of membership status will be assessed proportionately).

I sincerely hope the membership sees the wisdom in this assessment. To do otherwise would not be in the best interest of our membership considering the substantial "war chest" raised by the Trial Lawyer's Association. Tort reform is essential for physicians as well as businesses in this state. While we may not collect as much as the Trial Lawyers, we will spend the assessment more productively to enhance our position and reputation.

Finally, I wish to express my appreciation to our growing membership. By working together we can accomplish what is best for Georgia's physicians and our patients.

Chairman of the Board of Directors

Joe L. Nettles, M.D.

The following is the Fiscal Year 1986-1987 MAG budget as recommended by the Board of Directors.

MEDICAL ASSOCIATION OF GEORGIA

BUDGET SUMMARY

Category	*Projection Thru May 31, 1986*	*FY 1986 Budget*	*1987 Recommended Budget*
Revenue			
Dues Revenue	$1,680,000	$1,665,100	$1,739,300
Risk Management	30,000	10,000	10,000
Advertising Sales	128,000	120,000	132,000
Scientific Assembly	44,000	39,125	0
Leadership Conference	19,300	17,500	17,500
Journal Subscriptions	6,500	6,500	6,500
AMA Refund	7,300	8,000	8,000
Data Processing	106,000	242,000	80,000
Interest Income	77,000	30,000	110,000
Rental Income	30,000	30,800	34,000
Miscellaneous Income	26,000	40,000	35,000
Physician Placement	2,000	2,200	2,000
Total Revenue From Regular Operations	$2,156,100	$2,211,225	$2,174,300
Expenditure Totals			
Administration	$ 831,347	$ 856,362	$1,020,519
Membership Services	119,723	132,115	142,865
Building	168,725	162,952	185,865
Journal	165,999	148,491	173,274
Data Processing	323,381	363,579	254,013
Other	5,700	8,600	3,600
Board Contingent	15,000	70,000	50,000
Committees	323,230	353,064	308,464
Total Expenditures for Regular Operations	1,953,105	2,095,163	2,138,600
Excess Revenue Over Expense Regular Operations	202,995	116,062	35,700
Extraordinary Items	(105,000)	0	0
Net Revenue Over Expense Regular Operations	97,995	116,062	35,700

ADMINISTRATION

Expenditure Category	*Projected Expenditures Thru May 31, 1986*	*FY 1986 Budget*	*1987 Recommended Budget*
Salaries	$541,660	$532,172	$ 661,082
Health Insurance	39,845	44,200	39,200
Disability Insurance	3,840	4,287	4,350
FICA Tax	30,292	31,505	41,257
Unemployment — State	1,260	998	1,400
Unemployment — Federal	1,380	1,128	1,530
Retirement	30,365	33,294	44,980
Recruitment	146	500	300
Legal Fees	10,400	52,500	10,000
Telephone	39,732	43,700	44,000
Postage	37,847	32,822	44,400
Staff Travel	26,300	27,820	27,820
Printing	1,900	2,500	2,500
Dues & Subscriptions	1,900	2,600	2,200
Audit	13,000	8,000	15,000
Office Supplies	16,000	14,000	17,500
Xerox Maintenance	11,000	7,836	13,500
Reference Trust Fee	4,000	2,000	4,500
Equipment Maintenance	9,800	10,500	11,500
Temporary Help	3,200	4,000	3,500
D&O Coverage	7,500	0	30,000
Total — Administration	$831,347	$856,362	$1,020,519

BUILDING EXPENDITURES

Expenditure Category	*Projected Expenditures Thru May 31, 1986*	*FY 1986 Budget*	*1987 Recommended Budget*
Building Maintenance	$ 11,400	$ 10,000	$ 13,000
Janitorial Service	16,500	17,000	18,000
Insurance-Casualty	7,950	7,900	8,800
Utilities	39,875	37,406	43,065
Depreciation — Building	34,000	37,500	37,500
Depreciation — Equipment	36,000	35,221	39,500
Ad Valorem Tax	23,000	17,925	26,000
Total — Building Expenditures	$168,725	$162,952	$185,865

MEMBERSHIP

Expenditure Category	*Projected Expenditures Thru May 31, 1986*	*FY 1986 Budget*	*1987 Recommended Budget*
Travel — President	$ 4,000	$ 4,000	$ 5,000
Travel — President Elect	3,000	4,000	4,000
Travel — Past President	3,000	3,000	1,750
Travel — AMA Delegates	30,640	33,500	40,000
Caucus Breakfast	2,591	1,600	2,600
Headquarters Suite	4,672	3,900	5,000
Southeastern Coalition	2,605	2,900	2,800
Travel — Secy & Treas to AMA	2,300	5,600	5,600
Two MD's to AMA Leadership	1,600	1,600	1,600
AMA-MSS	3,840	3,840	3,840
State Medical Education Luncheon	350	375	375
Sundry	540	600	600
Executive Committee — Provisional	2,000	6,000	6,000
Executive Committee — Travel	5,600	8,700	8,700
Business Coalition	4,000	4,000	4,000
Meetings	9,800	9,000	10,000
President — Provisional Fund	24,000	24,000	24,000
Roster	12,185	12,500	14,000
Proceedings Issue	3,000	3,000	3,000
Total Membership	$119,723	$132,115	$142,865

JOURNAL

Expenditure Category	Projected Expenditures Thru May 31, 1986	FY 1986 Budget	1987 Recommended Budget
Salaries	$ 39,742	$ 40,275	$ 41,479
Health Insurance	3,719	4,350	4,017
FICA	2,813	2,839	3,035
Retirement	1,968	2,822	2,918
Printing	98,622	81,000	102,400
Photo Processing	500	400	500
Advertising Promotion	1,000	1,000	100
Postage	9,200	9,200	10,120
Clipping Service	480	480	480
Dues and Subscriptions	225	225	225
Artwork	5,930	4,100	6,000
Travel	1,800	1,800	2,000
Total — *Journal*	$165,999	$148,491	$173,274

DATA PROCESSING

Expenditure Category	Projected Expenditures Thru May 31, 1986	FY 1986 Budget	1987 Recommended Budget
Salaries	$ 92,167	$103,265	$ 82,106
FICA	6,589	7,280	5,870
Health Insurance	6,100	9,174	4,760
Disability Insurance	300	1,030	820
Retirement	1,400	6,834	5,700
Unemployment — State	390	545	297
Unemployment — Federal	460	525	345
Insurance Equipment	1,100	1,100	1,350
Equipment Rental	34,500	49,500	4,200
Equipment Maintenance	48,300	48,300	33,000
Data Communication	1,850	4,800	815
Supplies — Durable	1,700	3,176	1,500
Supplies — Expendable	11,325	19,900	12,000
Installation/Site Prep	0	2,000	0
Depreciation/Amort	83,500	66,911	73,000
Travel	3,000	3,000	2,500
Education & Dues	676	500	500
Consulting Fees	7,300	7,500	11,000
Temporary Help	0	200	0
Recruitment	8,874	275	200
Office Operations	7,300	6,181	7,500
Software Documentation	6,550	21,583	6,550
Total-Data Processing	$323,381	$363,579	$254,013

OTHER

Expenditure Category	Projected Expenditures Thru May 31, 1986	FY 1986 Budget	1987 Recommended Budget
Franklin Benefits	$ 3,600	$ 3,600	$ 3,600
Campaigns	2,100	5,000	0
Board Contingent	15,000	70,000	50,000
Total Other	$20,700	$78,600	$53,600

COMMITTEES & SPECIALTY SOCIETIES

Expenditure Category	*Projected Expenditures Thru May 31, 1986*	*FY 1986 Budget*	*1987 Recommended Budget*
Access to Health Care	$ 1,980	$ 4,000	$ 5,000
Annual Session	21,000	21,000	22,000
Auxiliary	41,000	43,064	63,549
Cost Awareness	250	1,000	1,000
Doctor-of-Day	4,995	5,830	5,500
Impaired Physicians	50,000	50,000	25,000
Legislation & Bulletin	59,490	65,000	65,000
Physicians Involvement	2,300	4,900	4,900
Education	2,875	2,875	2,875
Medical Aspects of Sports	1,240	1,700	1,300
Nutrition	0	500	500
Physician-Lawyer Liaison	2,000	4,650	7,500
Membership Insurance	0	1,500	1,500
Public Relations	50,000	50,000	50,000
Scientific Assembly	42,000	39,125	0
Newsletter	13,100	13,100	16,000
Third Party Relations	0	2,520	1,500
Leadership Conference	19,000	17,500	17,500
Computers in Medicine	0	1,500	1,000
Resident Project	7,200	7,200	7,840
Public Health	1,800	3,000	3,000
MSS	0	1,100	0
Medical Schools	0	1,000	1,000
Membership	3,000	11,000	5,000
Total-Committees	$323,230	$353,064	$308,464

	Projection Thru May 31, 1986	*FY 1968 Budget*	*1987 Recommended Budget*
Dues Assessment Income	$2,667,000	0	$500,000

TORT REFORM

Expenditure Category	*Projected Expenditures Thru May 31, 1986*
Temporary Help	$ 2,702
Telephone	1,048
Postage	18,666
Staff Travel	9,386
Printing and Xerox	41,523
Office Supplies	9,480
Meetings	8,206
Consulting Fees	63,564
Other	5,425
Total	$160,000

0	0	$500,000

ALTERNATIVE DELIVERY SYSTEM

Expenditure Category	*Projected Expenditures Thru May 31, 1986*
Salaries	$122,649
Temporary Help	2,736
FICA	7,976
Legal Fees	181,225
Telephone	5,746
Postage	19,113
Staff Travel	10,800
Printing/Xerox	19,266
OfficeSupplies	9,036
Meetings	1,400
Insurance	15,060
Consulting Fees	163,418
Other	2,560
Total Ads	$560,985

Recommendations:

Four key recommendations were approved by the Board of Directors and are to be incorporated into the fiscal year 1987 Budget submitted to Reference Committee F:

1. The Board of Directors recommends a $100 dues assessment to provide funds for tort reform activities. The dues assessment will be prorated for those members paying reduced dues because of billing status.
2. The Board of Directors recommends that county medical societies not remitting dues to MAG within 30 days of receipt will be subject to an interest penalty based upon the Three Month Treasury Bill Rate plus 3%.
3. The Board of Directors recommends funding the Impaired Physician Program at $25,000. As background the Finance Committee and the Impaired Physician Committee believes that alternative funding can be provided from institutions profitting from inpatient admissions, insurance companies and perhaps a $10 to $20 addition to state medical license fees.
4. The Board of Directors recommends discontinuing the MAG Cancer Registry computer contract since continuing the contract will require an outlay of MAG funds of $30,000 above and beyond funds the Georgia Department of Human Resources is willing to pay. The Cancer Registry includes only 33 hospitals in the state and MAG is often subject to criticism because of the lack of a state-wide program.

House Action:

Recommendation 1 — Adopted as amended: That MAG institute a $200 mandatory assessment for each full dues paying member to finance tort reform activities. Members paying less than full dues because of billing class will be assessed proportionately.

Recommendation 2 — Adopted as amended: That Counties performing dues billing will remit collections to MAG by January 1 of each year. After January 1 counties not remitting dues within 30 days of receipt will be subject to an interest penalty based upon the Three Month Treasury Bill Rate plus 3%.

Recommendation 3 — Adopted as amended: Increase funding for the Impaired Physicians Program by $25,000, to total $50,000; increase total committees and specialty societies by $25,000, to total $333,464; increase total expenditures for regular operations to $2,163,000; increase excess revenue over expense regular operations and net revenue over expense regular operations to $10,700.

Recommendation 4 — Adopted as amended: That MAG should discontinue the Cancer Registry data processing contract effective July 1, 1986, unless sufficient funding is received.

Public Relations Committee

Jeffrey T. Nugent, M.D.

(See Report of Reference Committee G for the full report of the Public Relations Committee.)

Recommendations:

1. The Public Relations Committee recommends a $100 assessment for each active member of MAG in order to continue our public education campaign concerning the liability crisis.
2. The Public Relations Committee recommends that in a 1986-87 campaign strong support be obtained from Governor Joe Frank Harris for measures proposed by the Georgia Liability Crisis Coalition.

House Action:

See Budget report for action on Recommendation 1.

Access to Medical Care Committee

M. Julian Duttera, Jr., M.D.

(See Report of Reference Committee B for the full report of the Access to Medical Care Committee.)

Fiscal Note:

Funds to proceed with these two projects have been included in the proposed MAG 86-87 budget.

House Action:

Adopted the Fiscal Note.

Resolution 22

Tort Reform

DeKalb Medical Society, Inc.

RESOLVED, that MAG establish tort reform as its highest priority, and be it further

RESOLVED, that MAG assess each member $500 to finance this program over the coming year, and be it further

RESOLVED, that MAG shelve all activity on its HMO/IPA for one year or until meaningful tort reform has been enacted in order that we can devote maximum energy and resources to this urgent cause.

House Action:

See Report of Reference Committee C for action on Resolve 1.

See Budget Report for action on Resolve 2.

See Reference Committee B for action on Resolve 3.

Report of Reference Committee G

Charles A. Lanford, M.D., Chairman

Philip Z. Israel, M.D., Vice Chairman

During its meeting of April 25, Reference Committee G gave careful consideration to its referred reports and resolutions. The following physicians were members of that Committee: Charles A. Lanford, Chairman, Macon; Philip Z. Israel, Vice Chairman, Marietta; Roland S. Summers, Savannah; J. E. Roberts, Austell; Alexander H. S. Weaver, Macon; William W. Moore, Jr., Atlanta; James L. O'Quinn, Augusta; Charles W. McDowell, Jr., Decatur; H. Gordon Davis, Jr., Sylvester; and Wyman P. Sloan, III, Atlanta.





Members of Reference Committee G.

Public Relations Committee

Jeffrey T. Nugent, M.D.

The Public Relations Committee was charged by the 1985 House of Delegates to conduct a public education campaign to promote policies of MAG. Under the guidance of President Dub Logan, a Tort Reform Campaign was developed by participants from the Executive Committee, Legislative Committee, Public Relations Committee, Auxiliary, Ad Hoc Malpractice Committee and the MAG Mutual Insurance Company.

During the summer of 1985, following verification of "liability facts" and determination of elements to be supported in a Tort Reform package, the Public Relations Committee met on four occasions to plan for physician and public education. Six Georgia public relations firms were interviewed and our report was presented to the Executive Committee. The firm of Manning, Selvage and Lee, under the direction of Mr. Jim Gray, was chosen to assist us in our planning. MAG in-house supervison of public relations was performed by Miss Sherry Waronker, MAG Director of Communications.

Our education campaign targeted primarily the months of November and December; 1985, January and February, 1986 we brought the following messages to the public:

(1) The public is in general paying for costs of this liability crisis by increased prices of goods and services;

(2) There is an unprecedented flood of high jury awards which is causing runaway liability insurance costs for not only medicine, but all of business and government.

(3) Medical care itself is adversely affected by factors, such as, limited access to certain specialties, interference with the proper doctor-patient relationship and exorbitant costs of defensive medicine.

The Georgia Liability Crisis Coa-

lition (composed of over seventy trade associations with representation from large and small businesses and city and county governments) was formed in order to present a united appeal to the public and our legislators. The Coalition drafted and sponsored H.B. 1184-1186, as introduced in the House by Representative Pete Robinson (D-Columbus, Georgia). These proposed bills institute a $250,000.00 cap on non-economic damages, a cap on lawyer contingency fees, a proposal to prohibit juries from holding a defendant liable for complete financial responsibility for injuries if the defendant was only partly responsible, disclosure of collateral sources of payments, structured settlements for injured parties, judicial authority to modify awards.

During the course of the legislature the Georgia Trial Lawyers Association was vocal in proposing 1) that the insurance industry itself was to blame for the current crisis, a crisis of mismanagement, 2) Georgians would lose basic legal rights if tort reform changes were to occur, 3) liability claims are necessary, particularly in the medical profession, because doctors do not police themselves well. The Trial Lawyers organized a "victims of malpractice" demonstration at the capitol in early February at the time of the doctor's rally and, furthermore, undertook an extensive media campaign in order to shift the blame for increased costs.

As the final minutes of the legislative session drew to a close it became apparent that the Conference Committee Report was not going to be voted on this session. Notable during this period were the following: (1) Governor Joe Frank Harris took no public position on the liability laws proposed; (2) House Speaker Tom Murphy presented strong opposition to the reform bills; (3) the Trial Lawyers were the chief organized group weakening proposed measures at every possible occasion; (4) Many of the business leaders of both House and Senate felt that the General Assembly should have come up with some solutions to the liability crisis in this session.

Mailouts

In the months of August and September, two all-member physician mailings and two all-member auxiliary mailings were sent out. These mailings consisted of a cover letter, a professional liability survey, pledge/donation card, fact sheet and Tort Reform Highlights. Through those four mailings close to $165,000 was raised in donations and pledges.

In October and November, two all-member physician and two all-member auxiliary mailings were sent out regarding the February Leadership Conference. These mailings included cover letters, Leadership Conference *pre*-registration cards and factual data on the liability crisis.

In December, an all-member physician and all-member auxiliary mailing was sent out. These mailouts consisted of a Leadership Conference agenda, a cover letter, and a registration form. In addition, the physician mailout contained 25 liability/patient brochures and one civil justice reform button.

There were additional mailouts to county medical society and auxiliary presidents, specialty society presidents, MAG officers and the Georgia Liability Crisis Coalition members. The most crucial of these mailings was the liability speakers' kits which contained information for those physicians and others assigned to speak at medical and civic clubs and to the press.

There have also been various MAG Journal and Newsletter articles dealing with the liability crisis, the latest being an article in the March *J-MAG* — this year's Auxiliary special edition.

Support Materials

The following support materials were produced:

General liability kits and speakers' kits which contain face sheets, backgrounders, an insurance industry overview, the package of legislative proposals, a packet of newspaper articles on the liability crisis, sample response letters and letters to the editor.

Liability brochures entitled, "There's a Flood of Lawsuits Threatening Your Health Care." Initially 25 were sent to every MAG member. Since that time, thousands have been ordered and sent out.

Liability badges which read, "Support Civil Justice Reform 1986" which were worn by all participants at our February 4th Mass Visit at the State Capitol.

A liability slide presentation with a script for physicians and other speakers to use in their presentations.

Speaking Engagements

There were over 100 liability speaking presentations made during the November 1985 to February 1986 period. The presentations ranged from medical societies and hospitals to Rotary, Kiwanis and Lions' Clubs. There were also selected meetings with elected officials and political parties. The breakdown was as follows:

November — 21 speaking engagements
December — 23 speaking engagements
January — 50 speaking engagements
February — 15 speaking engagements

The speakers came mainly from MAG's Liability Speakers' Bureau, MAG's Ad Hoc Committee on Professional Liability and MAG staff. Several coalition members were also helpful in making various presentations. Many of the speaking presentations were covered by the local press and received good placement in local papers.

Press Work

Press coverage of the liability campaign and crisis was continuous, although it reached a peak in January. We received, from our clipping service and doctors throughout the state, over 300 newspaper articles — most of which were generated by our campaign activities. The issue also received national attention. We received clippings from such

publications as *U.S. News and World Report, U.S.A. Today, Newsweek, Time* and the *Wall Street Journal.*

There was also a great deal of interest in the actions of the Georgia Liability Crisis Coalition, and the resulting December 18th press conference at the Capitol generated much coverage by the broadcast media, as did the MAG February 4th Capitol visit. TV cameras from almost every major city were there covering the event — 2,000 physicians showing their concern over Georgia's liability crisis.

There were three news releases sent out statewide which received much attention. The first was a report on the results of the MAG professional liability survey. The second was on the formation of the coalition, and the third was a statement on the exorbitant Jan Kemp v. UGA Award.

The majority of the press coverage was favorable, although the last three weeks of the General Assembly proved to be a more difficult time for garnering positive coverage. There was, however, enough interest in the subject to warrant the Atlanta press in January calling the liability issue the "hot potato of the 1986 General Assembly." However, the failure to achieve any meaningful tort reform was summed up as "an embarrassment" for the General Assembly.

Budget

We raised, through individual physician donations and pledges, approximately $165,000. Expenditures totalled over $160,000. These expenditures from most expensive to least expensive included:

—Public Relations Consultant
—Collateral/support materials
—Speaker Training
—Mailings
—Advertising
—Outside vendors (labor for mailings, printing, delivery, audio visuals, etc.)
—Events, meetings
—Travel

That is a lot of mileage for a $165,000 budget to get over a six month period of time. This is mostly due to the generous volunteer time of MAG physicians, auxilians and friends, who travelled around the state making representations, called and wrote their legislators, and bombarded the media with editorials and letters to the editor. Physicians demonstrated to the public and the legislature that they were alarmed by the runaway costs of liability insurance.

Leadership Conference

The culmination of MAG's liability campaign efforts was the 3-day Leadership Conference which ended with the February 4th Capitol visit. The entire second day of the conference was devoted to the liability crisis and an explanation of our lobbying efforts. The last day, the visit, turned out to be a very pleasant, non-chaotic show of concern at which over 2,000 physicians, spouses and other medical personnel attended. Packed outside the west entrance of the Capitol, jamming sidewalks and street corners, the group heard inspiring messages from distinguished speakers including MAG President William D. Logan, Jr., M.D., Lt. Governor Zell Miller, Robert E. Wells, M.D., Sam Atkins, M.D., Martin Smith, M.D. and E. Culver ("Rusty") Kidd, III.

Television, radio and newspapers gave our demonstration widespread and generally favorable coverage.

Other efforts MAG's PR Committee and PR staff have been involved with include the following:

1. Working with the MAG Public Health Committee in writing and disseminating anti-smoking public service announcements, brochures, signs and stickers.
2. Working with the Georgia Society of Ophthalmology (GSO) in promoting Eye Health Care Month and the GSO itself. Activities have included: writing and mailing public service announcements, disseminating radio and TV spots with Bob Hope and as spokesperson for Eye Health Care Month; writing and placement for a statewide newspaper ad on eye health care; dissemination of materials from the American Academy of Ophthalmology.
3. Writing and distribution of health tip brochures and health tip public service announcements on topics ranging from smoking, nutrition, and exercise to proper prescription drug use and weight control.
4. Assistance in marketing and PR activities of the newly-created MAG HMO.



The Chairman of the Public Relations Committee, Dr. Jeff Nugent, of Atlanta, addresses the House of Delegates.

Recommendations:

1. The Public Relations Committee recommends a $100 assessment for each active member of MAG in order to continue our public education campaign concerning the liability crisis.
2. The Public Relations Committee recommends that in a 1986-87 campaign strong support be obtained from Governor Joe Frank Harris for measures proposed by the Georgia Liability Crisis Coalition.

House Action:

See Report of Reference Committee F for Action on Recommendation 1.

Adopted Recommendation 2 as amended:

The Public Relations Committee recommends that in the 1986-87 campaign strong support be sought from the Governor of Georgia for measures proposed by the Georgia Liability Crisis Coalition and that Dr. Jeff Nugent, the members of the Public Relations Committee, and its staff, Sherry Waronker and Bo Shurling, be commended for their tireless efforts in our 1966 Tort Reform Campaigns.

Ad Hoc Committee on Medical Liability

Ernest C. Fokes, M.D.

At the 1986 meeting of the House of Delegates of the Medical Association of Georgia, two resolutions were made and passed dealing with the medical liability crisis and the establishment of a Medical Liability Committee to deal exclusively with that crisis. The resolution presented by Dr. Hugo S. Moreno did not deal directly with the development of such a committee: but, rather, encouraged that the Medical Association of Georgia organize a program across the state to involve physicians in educating patients, etc. about the gravity of the present professional liability crisis and that "Some mechanism by which this public concern can be transmitted to the Georgia Legislators prior to the 1986 meeting" be developed. It suggested the development of a committee for that purpose.

The resolution introduced by Cobb County Medical Society resolved that, "The Medical Association of Georgia establish a Priority Committee with a mandate to consider only this single issue and to work with a similar committee from MAG Mutual Insurance Company to achieve a permanent solution."

It was in the spirit of these two resolutions that the Medical Association of Georgia Ad Hoc Committee on Medical Liability was established with me as the Chairman.

This committee met first in July and considered the directives given it. Our deliberations were then presented to the MAG Executive Committee meeting on 7/20/85. We asked for the backing of the Executive Committee in carrying out the charge of the House of Delegates, and specifically "That the Ad Hoc Committee on Medical Liability act as a coordinating committee with other committees currently working on medical liability problems." This motion did not pass, but a motion that did pass stated "The charge of the Ad Hoc Committee on Medical Liability is: 1) To carry out those functions designated by the House of Delegates." In addition, it was stated "That the Priority Committee of the Medical Liability Committee take no direct actions without first reporting to the Executive Committee or Board of Directors."

It was the feeling of myself and the other members of the Priority Committee on Medical Liability that this had a hamstringing effect on the Committee and that, in fact, we were not authorized to carry out the duties given us by the House of Delegates. It was in a total spirit of cooperation, however, that we proceeded with meetings in September and October trying to formulate ideas and work toward development of a legislative program that would be functional. In the course of these two months, members of the Committee expressed deep concern over the tardiness of the program in general. It was the feeling of the Committeethat efforts towards legislative reform should have been started earlier in the summer and that we were quite late in beginning this process. However, all members pitched in enthusiastically to lend their support to a public relations campaign and a public education campaign that was subsequently carried out across the state.

In this context, the Ad Hoc Committee on Medical Liability found itself as a subcommittee of the Public Relations Committee. In this role, the members of the Ad Hoc Committee traveled widely throughout the state addressing any and all civic and professional societies that would lend an ear to hear about the problem. We met with a generally very receptive audience, and I feel that this duty was carried out exceptionally well.

Nonetheless, it was the opinion of the Committee, and voiced numerous times, that a coordinating committee such as was anticipated and directed by the House of Delegates did not, in fact, exist and that this had a limiting effect on the activities that were directed toward legislative reform.

It is the opinion of the Committee and its Chairman that such coordination is imperative.

Finally, as regards directions for attempts at improvement in the medical liability climate in Georgia, your Committee has the following suggestions.

I. Continue an all-out effort toward tort reform. However, we are concerned that this may be a "stopgap" measure and that a more broad-based "shotgun" approach to the overall problem is necessary. In this regard:

II. Public education — This has been proposed by the AMA and other medical organizations and societies and I think we need to become involved in it more intensely. The thrust of the educational program should be something along the lines of "You pay for these verdicts." Emphasizing *all* verdicts including those against business and government particularly.

III. Additional considerations regarding legislation:
 - A. Consider that there should be a point at which plaintiff places him/herself at jeopardy for fees.
 - B. Review means of handling nonmeritorious cases including binding arbitration.

IV. Insurance Reform.
 - A. Business, governments, and professional persons should not have to bear all of the burden as we are currently doing. Liability insurance has, in fact, become a form of disability insurance for the plaintiff and awards are being

made on nonmeritorious cases.

B. Patient insurance programs: In this regard, we would suggest working with the State Insurance Commissioner to develop a committee to investigate insurance programs that will compensate for adverse events without resorting to legislation. It would appear that the most logical program would be one which would protect the *patient* and not the physician against adverse outcomes. This would take the form of "designated compensable event" insurance.

Finally, your Committee urges that the Medical Association of Georgia employ a campaign manager to manage and coordinate efforts toward tort reform in the most efficient manner possible.

House Action:

See House Action for following Report.

Report of the Ad Hoc Tort Reform Planning Committee

William D. Logan, Jr., M.D., Chairman

The MAG Executive Committee, at its March 9, 1986 meeting, voted to create a Tort Reform Planning Committee whose goal would be to develop recommendations for a plan of action for MAG's 1986-87 tort reform efforts. The committee, composed of those officers, committee chairmen, and staff who were directly involved in this past year's tort reform project, met on March 27, 1986. After discussion and evaluation of MAG's previous tort reform campaign, the following recommendations for a new campaign were proposed:

Recommendations:

1. The committee endorses a dues assessment of all MAG members to fund a full-scale tort reform campaign and recommends passage of such a measure.
2. The committee supports continued development and expansion of the Georgia Liability Crisis Coalition and its activities, and recommends exploring the possibility of appointing a full time person to spearhead the coalition's efforts.
3. The committee recommends that the House direct MAG staff to continue working vigorously toward passage of tort reform in 1987.
4. The committee recommends that a major public education/media campaign be launched in order to continue raising awareness and shaping public opinion on the tort reform issue.
5. The committee, recognizing the significance of this being an election year, recommends that *strong* emphasis be placed on GaMPAC as a way of ensuring support of medicine in the legislature.
6. The committee, recognizing that the medical liability insurance industry needs to participate more in tort reform efforts and make more insurance data available, recommends the formation of a Long Range Planning Committee on Insurance Reform.

House Action:

This report and the report of the Ad Hoc Committee on medical liability were considered together and adopted by substituting the following:

"That MAG appoint a committee to deal solely with Tort Reform and that the MAG Executive Committee assign a person to this issue and committee on a full time basis."



John D. Watson Jr., M.D., 1985-86 President-elect of the MAG.

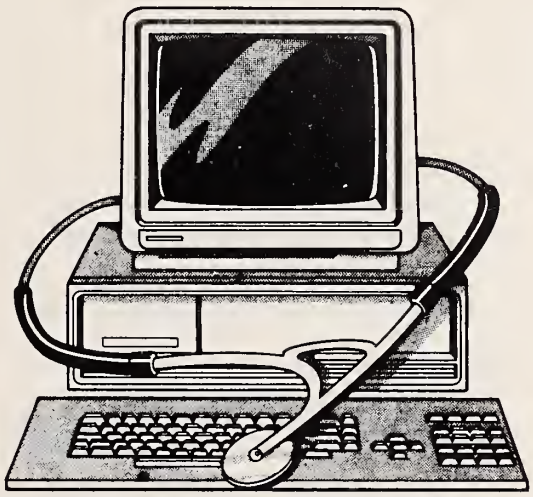


Speaker of the House, Jack A. Menendez, M.D., of Macon.

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PERSONALS

First District

C. Walker Beeson, II, M.D., has been elected as the Chief of Staff at Memorial Medical Center. A 1963 graduate of the Medical College of Georgia,

Dr. Beeson interned in medicine and was in general internal medicine at the College.

Edward F. Stringer, III, M.D., has been chosen Chief of Staff-elect. Dr. Stringer, a 1972 graduate of the Medical College of Georgia, served his surgical internship and residency at Memorial Medical Center.

Fourth District

Robert Fine, M.D., has been named Chief of Radiology at Boswell Hospital in Decatur. He practiced previously at Shallowford Hospital and Gwinnett Hospital in Atlanta.

Sixth District

W. Douglas Skelton, M.D., dean and provost of the Mercer University School of Medicine, has been selected by the Atlanta Region of the American Jewish Congress as the first recipient of the Grace Towns Hamilton Award. The honor is in recognition of his many years of public service, which includes his leadership in the field of mental health, his tenure as commissioner of the Georgia Department of Human Resources, and his current chairmanship of the state task force on AIDS.

Seventh District

William Harbin, M.D., of Rome, Georgia, recently retired from his internal medicine practice at Harbin Clinic, where he is medical-director emeritus. During his 54-year medical career, he has been president of the Hospital Service Association of Rome from 1940 to 1950, and a member of the Georgia Board of Health from 1938 to 1950. He has been president of the Medical Association of Georgia and the Floyd County Tuberculosis Association. Dr. Harbin remains a member of the American Academy of Medical Directors and a fellow in the American College of Physicians.

Other activities included serving as president of the Seventh District Medical Society, the Floyd County Medical Society, and the Georgia Diabetes Association. He was on the board of the Floyd Hospital Authority, was medical director of Floyd Medical Center, and on the medical staff at Redmond Park Hospital, McCall Hospital, and Floyd Medical Center. He is a charter member of the Georgia Heart Association and a member of the American Society of Internal Medicine.

In addition to his professional achievements and honors, Dr. Harbin donated his time and skill to the Indigent Care Medical Clinic at Floyd Medical Center for more than 30 years. He was instrumental in founding the Thornwood School, which merged with Darlington in 1973. He is a life trustee at Darlington School, and a member of the Rome Rotary Club.

Ninth District

Gregory Harold, M.D., is moving his family practice office to Perry. He was previously the medical director at the College Square Urgent Care Center in Gainesville.

DEATHS

First District

Edgar Joseph Filson, M.D., a former Candler Hospital Chief of Staff, died at age 55. He was a member of the Department of Radiology and served as vice-president of the Georgia Medical Society. Dr. Filson was a member of the Medical Association of Georgia, the American College of Radiology, the Radiological Society of North America, and the Georgia Radiological Society. He was a Fellow of the American College of Nuclear Medicine and the American Roentgen Ray Society, as well as a Diplomate of the American Board of Radiology.

Dr. Filson is survived by his wife and seven children.

Fifth District

Stephen Trent Barnett, Jr., M.D., of Atlanta, died of heart failure at age 79. Dr. Barnett practiced obstetrics and gynecology from 1947 to 1977. He graduated from the University of Georgia and Emory University, and served in the Navy during World War II. He belonged to the Medical Associations of Atlanta and Georgia, the Atlanta and Georgia Societies of Obstetrics and Gynecology, and the American College of Obstetrics and Gynecology.

Dr. Barnett is survived by his wife and three children.

QUOTES

I would feel more optimistic about a bright future for man if he spent less time proving he can outwit nature and more time tasting her sweetness and respecting her seniority.
E. B. White

You give but little when you give of your possessions. It is when you give of yourself that you truly give.
Kahlil Gibran

Creativity is the act of bringing something new into the world, whether a symphony, a novel, a supermarket or a new casserole. It is based first on communication with oneself, then testing that communication with experience and reality.
S. I. Hayakawa

Work is not of course, any more than play, the object of life; both are means to the same end.
John Lubbock

A man should never be ashamed to own he has been in the wrong, which is but saying in other words, that he is wiser today than he was yesterday.
Alexander Pope

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STYLE — Ordinarily articles should not exceed 3,000 words. Only under exceptional circumstances will articles of over 4,000 words be published. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

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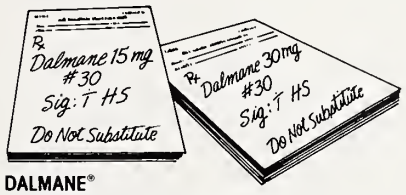
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References: **1.** Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frast JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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Precoutions: In elderly and debilitated patients, it is recammended that the dosage be limited ta 15 mg ta reduce risk af aversedation, dizziness, contusion and/ar ataxia. Cansider potential additive effects with ather hypnotics or CNS depressants. Emplay usual precautians in severely depressed patients, ar in thase with latent depressian ar suicidal tendencies, ar in thase with impaired renal ar hepatic functian.

Adverse Reoctions: Dizziness, drawsiness, lightheadedness, staggering, ataxia and talling have accurred, particularly in elderly ar debilitated patients. Severe sedation, lethargy, disarientation and coma, probably indicative at drug intalerance or overdosage, have been reported. Alsa reparted: headache, heartburn, upset stamach, nausea, vomiting, diarrhea, constipatian, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, bady and joint pains and GU camplaints. There have alsa been rare accurrences at leukapenia, granulacytapenia, sweating, flushes, difficulty in facusing, blurred visian, burning eyes, faintness, hypotensian, shortness of breath, pruritus, skin rash, dry mauth, bitter taste, excessive salivatian, anarexia, euphoria, depressian, slurred speech, cantusian, restlessness, hallucinations, and elevated SGOT, SGPT, tatal and direct bilirubins, and alkaline phosphatase; and paradaxical reactians, *e.g.*, excitement, stimulation and hyperactivity.

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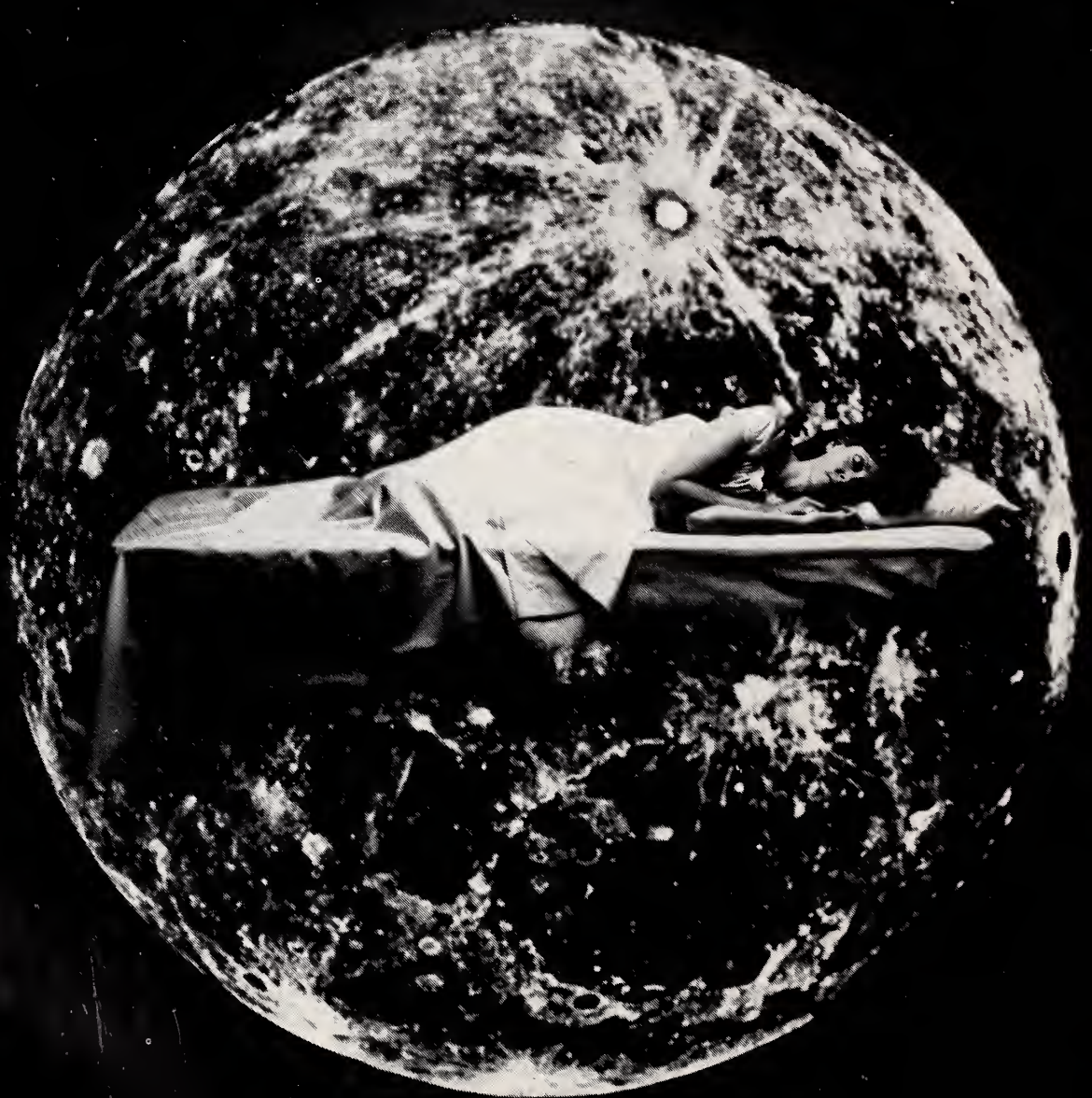
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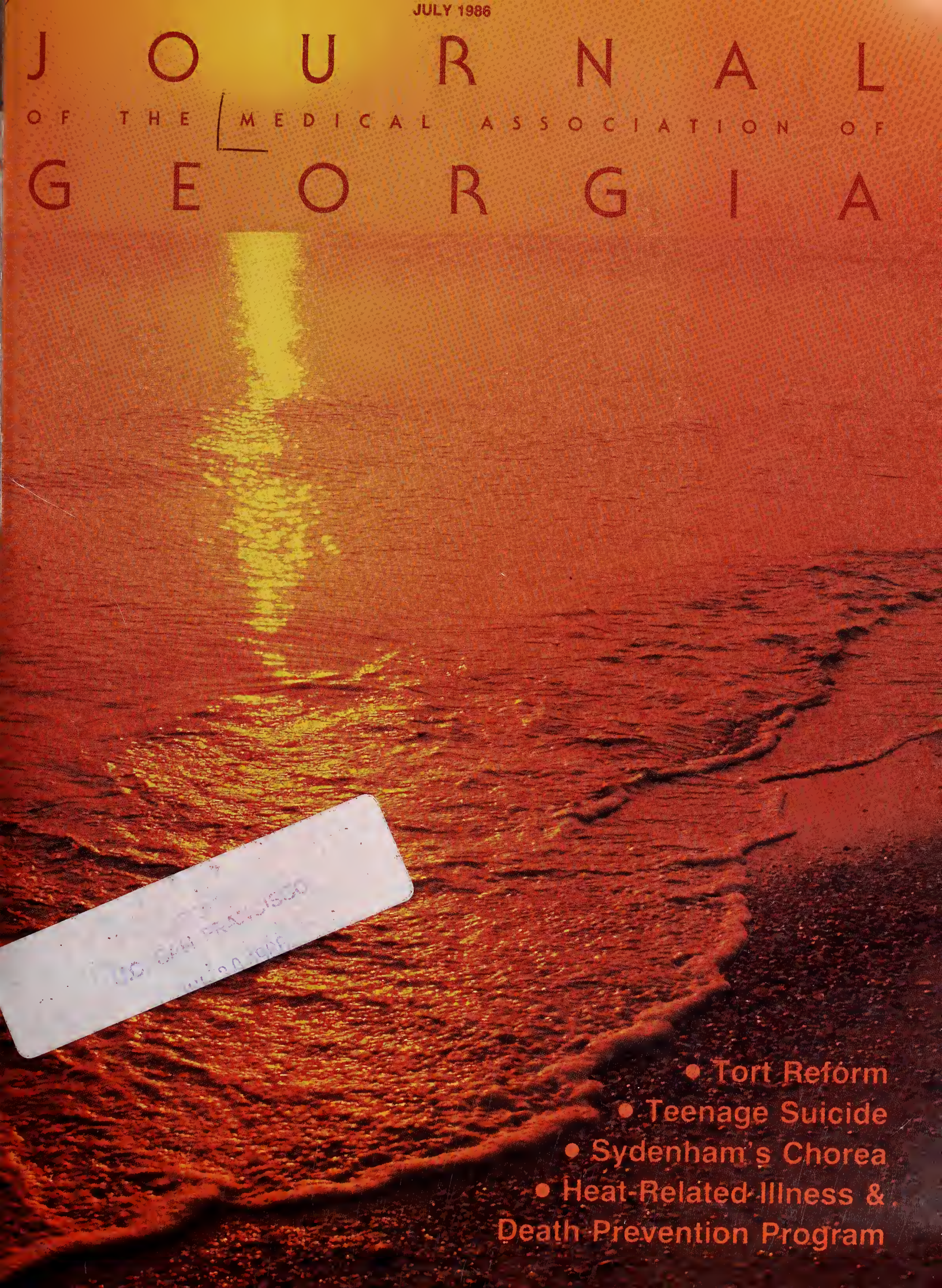
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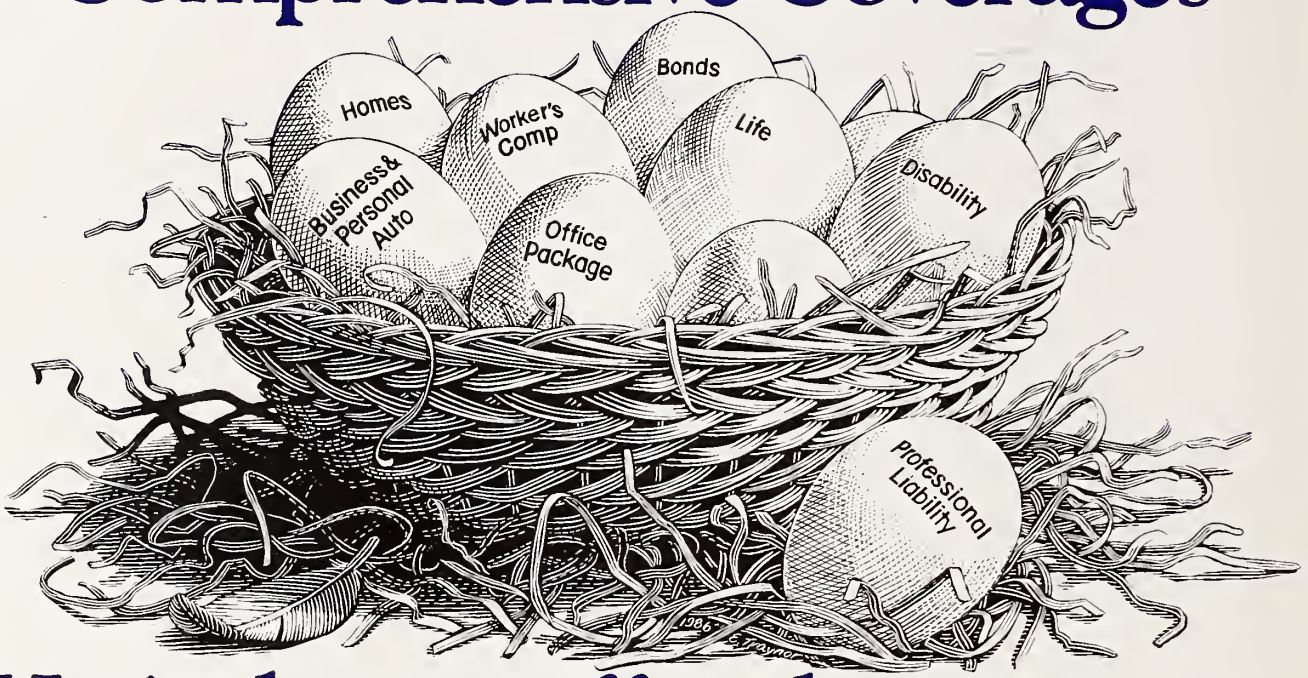
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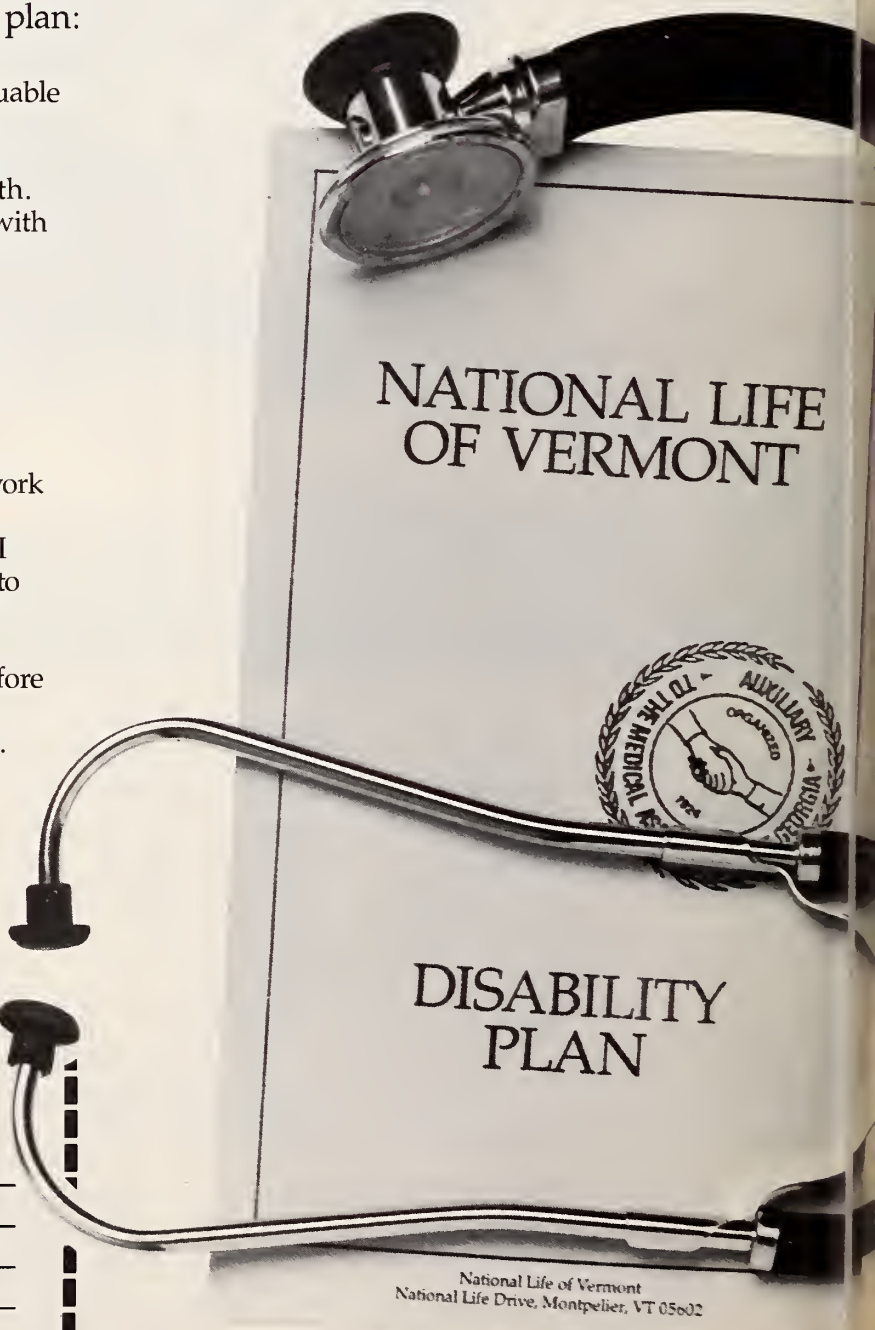
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MANAGING EDITOR
Susan J. Dillon

CONTRIBUTING EDITORS
Herbert E. Alden, M.D., Atlanta
Preston D. Ellington, M.D., Augusta
J.Willis Hurst, M.D., Atlanta
William R. Kenny, M.D., Atlanta
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COVER

Photo by Chuck Rogers, of Atlanta.

Dear Editor:

I was extremely impressed with the cover on the May, 1986, issue of the *Journal of the Medical Association of Georgia*. The artistic organization of the contents by this carefully planned photograph is fully self-explanatory. I feel that it was so exceptional because of the balance of colors, the attention to detail, including suggestions of both women and men smokers and the background visually "said it all."

This is one issue that I will not dispose of for a long period of time, and I am planning to place it in a most conspicuous location in our reception room. Both your managing editor and Mr. Rogers are to be commended for excellent thought, imagination, and quality of this photography.

Yours very truly,
Harold Asher, M.D.

Friendship is the only thing in the world concerning the usefulness of which all men are agreed.
CICERO

Behind many acts that are thought ridiculous there lie wise and weighty motives.
LA ROCHEFOUCHAULD

When a man has not a good reason for doing a thing, he has one good reason for letting it alone.
WALTER SCOTT

The most valuable thing I have learned from life is to regret nothing.
SOMERSET MAUGHAM

Fetter not commerce! Let her be as free as air. She will range the whole creation, and return on the four winds of heaven to bless the land of plenty with plenty.
PATRICK HENRY

Problems are opportunities and there are a lot of them around.
ARNOLD GLASOW

It is always well to moor your ship with two anchors.
PUBLILIUS SYRUS

Economic stimulation that encourages the increased expenditures of the rich has an aspect of soundness that is lacking in expenditures on behalf of the undeserving poor.
JOHN KENNETH GALBRAITH

It's getting so people don't want to work with their hands . . . or their head.
ARNOLD GLASOW

The world gets better every day — then worse again in the evening.
KIN HUBBARD

Life, not death, is the great adventure.
SHERWOOD ANDERSON

Make few resolutions. Make specific resolutions. And fulfill them with the help of God.
JOSEMARIA ESCRIVA

Towering genius disdains a beaten path. It seeks regions hitherto unexplored.
ABRAHAM LINCOLN

All the art of living lies in a fine mingling of letting go and holding on.
HAVELOCK ELLIS

The spending of our energies is the greatest possible stimulus to their re-creation.
CHARLES DARWIN

Laziness is particularly lethal. Laziness does not only consist in doing nothing, in sleeping too long, in working badly or not at all, but also in devoting our leisure to stupid or useless things.
ALEXIS CARREL

Children have never been very good at listening to their elders, but they have never failed to imitate them.
JAMES BALDWIN



The father in praising the son extols himself.
CHINESE PROVERB



CALENDAR

JULY

10-12 — *Kiawah Island, SC:* **Clinical Obstetrics.** AMA Category 1 credit; ACOG cognates. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

10-21 — *Edinburgh and Turnberry, Scotland:* **1986 Radiology Update** (preceding British Open Gold Championship). Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

12 — *Atlanta:* **Risk Management Seminar.** Category 1 credit. Contact James Moffett, Dir., Specialty Society Relations, MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

23-27 — *Kiawah Island, SC:* **9th Annual Critical Care Medicine.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

28-30 — *Kiawah Island, SC:* **9th Annual Pediatric Update: 1986.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

AUGUST

4-9 — *Hilton Head Island, SC:* **11th Annual Your Practice, Your Money, Your Family.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

11-15 — *Amelia Island, FL:* **1986 Summer Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

14-17 — *Hilton Head Island, SC:* **Georgia Psyschiatric Associatilon Interim Meeting.** Category 1 credit. Contact James Moffett, MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

18-22 — *Atlanta:* **A Comprehensive Board Review in Internal Medicine.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

22-24 — *St. Simons Island:* **MAG Legislative Seminar.** Contact MAG Legislative Div., 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

23-24 — *Sea Island:* **Georgia Society of Anesthesiologists: Cardiac Pitfalls in Clinical Anesthesia:** Category 1 credit. Contact William Hammonds, MD, Secy-Treas., Ga. Society of Anesth., 1364 Clifton Rd., Atlanta 30322. PH:404/321-0111 x 3900.

28-31 — *Sea Island:* **Georgia Society of Otolaryngology/Head and Neck Surgery Annual Meeting.** Category 1 credit. Contact James Moffett, MAG, 938 Peachtree St., Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

29-30 — *Sea Island:* **Georgia Chapter, American College of Physicians Annual Meeting.** Category 1 credit. Contact Malcom Page, M.D., Governor, MCG, Augusta 30912. PH:404/828-0211 x 4078.

SEPTEMBER

4-6 — *Atlanta:* **Introduction into Percutaneous Transluminal Angioplasty VI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

4-7 — *Kiawah Island, SC:* **Pulmonary Disease Review.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

7-11 — *Atlanta:* **Demonstrations in Percutaneous Transluminal Angioplasty XVI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

10-12 — *Atlanta:* **MKSAP VII American College of Physicians Review Course.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

14-16 — *Sea Island:* **Georgia Urological Association Annual Meeting.** Category 1 credit. Contact Jack Amie, M.D., Secy.-Treas., 2418 Parkwood Dr., Brunswick 31520. PH:912/264-6362.

14-17 — *Sea Island:* **Georgia Obstetrical & Gynecological Society Annual Meeting.** Category 1 credit. Contact Chester Lane, Exec. Secy., 69 Butler St., Atlanta 30303. PH:404/659-0289.

17-19 — *Savannah:* **10th Annual Neonatology — The Sick Newborn.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

18-20 — *Sea Island:* **Georgia Surgical Society Annual Meeting.** Category 1 credit. Contact William McGarity, M.D., Secy.-Treas., The Emory Clinic, 1365 Clifton Rd., Atlanta 30322. PH:404/321-0111 x 3322.

22-27 — *Augusta:* **Obstetrics and Gynecology.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

25-27 — *Hilton Head Island, SC:* **Frontiers in Nutrition.** Cateagory 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

26-28 — *Augusta:* **Georgia Gastroenterologic Society Annual Meeting.** Category 1 credit. Contact David Taylor, M.D., Secy.-Treas., 960 Johnson Ferry Rd., Ste. 345, Atlanta 30342. PH:404/252-9307.

OCTOBER

2-3 — *Atlanta:* **Georgia Chapter, American Academy of Pediatrics Annual Meeting.** Category 1 credit. Contact William Mankin, Exec. Secy., 4059 Land-O-Lakes Dr., Atlanta 30342. PH:404/237-3922.

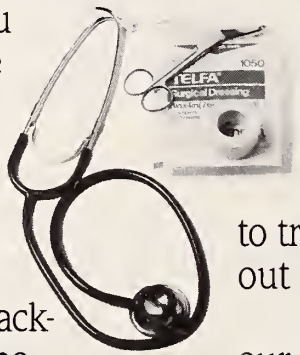
16-19 — *Sea Island:* **Georgia Orthopaedic Society Annual Meeting.** Category 1 credit. Contact David Apple, Jr., M.D., Secy., 938 Peachtree Rd., Ste. 710, Atlanta 30309. PH:404/352-2234.

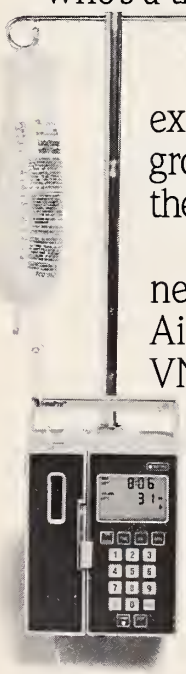


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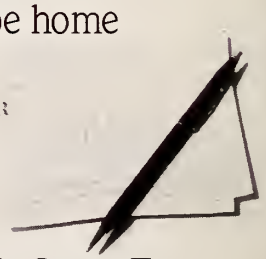
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The Physician's Image



John D. Watson, Jr., M.D.

The perception of who we are, what we are, and how we perform as physicians is extremely important in periods where social legislation is very near the forefront. The perception of the physician has changed dramatically from the days prior to antibiotics, modern anesthesia, etc. It is very difficult for us in this day and time to conceive of what it was like to be a physician in the early part of this century. Then, just about all they could do was be attentive to their patients and relieve intense suffering with opiates, etc. The body either had the ability to withstand the assault or perish.

We in medicine today inherited a marvelous position by being placed on a pedestal. However, as we all know, we are in the "Age of Documentation." We have seen the individual physician's image remain fairly high, but the overall image of the profession has continued to decline over the years. I am convinced that we could spend millions of dollars telling people how good, kind, and great we are, but it would only be a waste of time. It has been said by many that the only way physicians can gain their respected stature back is on a one-on-one basis.

There has never been a more important time for physicians to become involved, not only with their patients but also with community affairs, service clubs, school organizations, or any organization or group that is attempting to better the community and its people. Physicians are highly trained individuals with keen insights and perceptions, which can be of significant assistance to almost any group with which they care to associate.

Thus, in my judgment, for us to regain and maintain some of that image that others are attempting to destroy for their own social purposes, we must become more of a "giver" rather than a "taker." We must become more of a participant, a developer, a leader, and a contributor of our time to our community. Only by this personal involvement, and certainly there are many in our ranks who are already extensively involved, will we retain the respect and admiration of those whom we serve.

I cannot impress upon you how important these activities are for us at this particular time in Medical History. I sincerely request, urge, and encourage each of you to become as active as you possibly can — not just tacit association, but true activity with every worthwhile community group that you feel you can assist. I would also strongly encourage all of you to re-evaluate your contribution to community efforts financially as well. We are not looking for fanfare for our financial contributions, but we certainly do not need to invite negative remarks by a lack of financial support.

Sincerely,



Why Go To The Wilderness?

"Since accessibility to wilderness areas coincides nicely with school and summer vacations, this issue of the* Journal *seems an appropriate time and place to consider what the wilderness has to offer."

FRIENDS OFTEN ask me and my wife why we want to go canoeing in Canada when Georgia's beach resorts are so comfortable and so pleasant. We have thoroughly enjoyed the beach and other traditional vacation spots, but we still feel that there is something very special about a wilderness trip, both for us and for our family. Since accessibility to wilderness areas coincides nicely with school and summer vacations, this issue of the *Journal* seems an appropriate time and place to consider what the wilderness has to offer.

First, certainly, is the pleasure of simply being outdoors. Even if we are not really *doing* anything, being outdoors is good for the psyche. The breeze, the sun, outdoor sounds, and smells are enjoyable for almost everyone. Add a favorite physical activity such as walking, golf, tennis, cycling, or jogging, and it becomes more pleasant. Next we can seek out a more rustic locale, getting away from asphalt and bright lights with such activities as rafting, weekend canoeing, skiing, and horseback riding. Finally, we have the major move up to longer trips in more distant areas either designated as "wilderness' or so remote from population centers that they have remained wilderness because no one has yet thought of a way to "develop" them. From Atlanta, we have same-day access to large wilderness areas in Maine, the Adirondacks, the Rockies and Sierras, the Pacific Northwest, Alaska, and huge areas of central and western Canada. The further we get from our familiar civilized surroundings and their complex support systems, the more intense (for better or worse) the experience and the more effect it is likely to have on our thinking and feeling.

The uninitiated should first of all keep in mind that even though it may be a bit scary at first, being in the wilderness is most of all an awful lot of fun. It is certainly easy and quite proper to just enjoy the fun without analyzing it, but eventually you may wonder or be asked just *why* it is fun. Common sense suggests that there are surely many answers. Planning a wilderness trip is often a very enjoyable process, spread out over many months and involving considerable (usually redundant) review of maps, catalogs, guide books, and equipment. Those who are not interested in such things can easily contact knowledgeable, helpful, and reasonably priced outfitters and outing groups who can handle much of the logistical detail. For those who enjoy the planning, however, the time happily spent in this phase will often far exceed the time actually spent in the wilderness.This is particularly true when there are past trips to reminisce about and informal journals or photographs to retrieve and review.

I suspect that the "challenge" involved is almost always part of the fun — and the anxiety. Finding a route, overcoming obstacles or hardships, creating a "home" in the wilderness, reaching some personal goal, and developing new skills all lead us to feel good about ourselves. Increasing

competence and familiarity with the wilderness even leads us to imagine ourselves crossing the Appalachians with Daniel Boone or paddling the unexplored upper reaches of the Missouri with Lewis & Clark—amusing fantasies to be sure, but rather compelling just the same. For me there is also a hard-to-describe catharsis involved in being aware of and eventually getting through a mix of not-so-wonderful emotions that I often feel in the wilderness. These include feelings of loneliness, concern about getting seriously hurt or hopeless lost, worry about failure to measure up to the (perceived) expectations of my companions, and a long string of less cosmic worries about things like: will we ever find a place to camp, why does my knee hurt, will the trail ever stop going straight up, will the canoe broach and capsize if the wind shifts while I am trying to look at the map, or will the toilet paper last? Somehow, the loneliness, fear and miscellaneous worries always eventually subside, leaving a feeling of relief and a sort of "high" from having overcome or at least endured things that I was afraid of.

Also very important are the varied and largely unfamiliar sensations that compete for our attention in the wilderness. Sights, sounds, and smells all seem to be easily recaptured and relived in memory. Sounds that arouse the greatest feelings include the crash of a mountain thunderstorm, the patter of rain on a tent roof, the yap of coyotes on a distant ridge top, the crunch of snow underfoot, the whistle of mallards overhead, the rustle of wind in the aspens, and the eerie cries of loons on a remote Canadian lake. Memory evoking smells include resinous pine needles, "ozone" after a violent thunderstorm, the acrid odor of a skunk's annoyance, and bacon frying on the morning campfire. Powerful visual recollections include dew turning to frost at first light, sunrise on a misty lake, snowflakes falling softly on evergreens, fields of mountain wildflowers, the flash of a hummingbird, ducks splashing down at sunset, and the sweep of the milky way on a moonless winter night.

Except with solo trips (which I discourage), there will also be the pleasure of companionship and the added enjoyment of sharing experiences with family and/or friends. With family trips in particular, even adventures which are not considered total successes at the time seem to have a way of becoming essential parts of the family tradition, to be laughed, groaned, and talked about forever.

Physicians will usually be very attracted to the idea of being totally away from all telephones for days or weeks. Even in very remote areas, however, it is usually possible to arrange some sort of emergency contact (usually involving planes) in the unlikely event that there is a family crisis back home; thus, you really can get away without feeling irresponsible about it.

Some wilderness travelers also describe a somewhat spiritual recognition of simultaneously feeling utterly inconsequential in the overall

"Finding a route, overcoming obstacles or hardships, creating a 'home' in the wilderness, reaching some personal goal, and developing new skills all lead us to feel good about ourselves."

"For me there is also a hard-to-describe catharsis involved in becoming aware of and eventually getting through a mix of not-so-wonderful emotions that I often feel in the wilderness."

scheme of things yet also somehow closer to being "one with the universe." These feelings seem particularly strong when first looking out over a canyon rim or on discovering that about the only thing to be seen in any direction is mountain peaks stretching to the horizon. While we may *be* any closer to God (or whatever really matters in the universe), we still *feel* that we are, and that seems enough to make it a moving and perhaps even valuable experience.

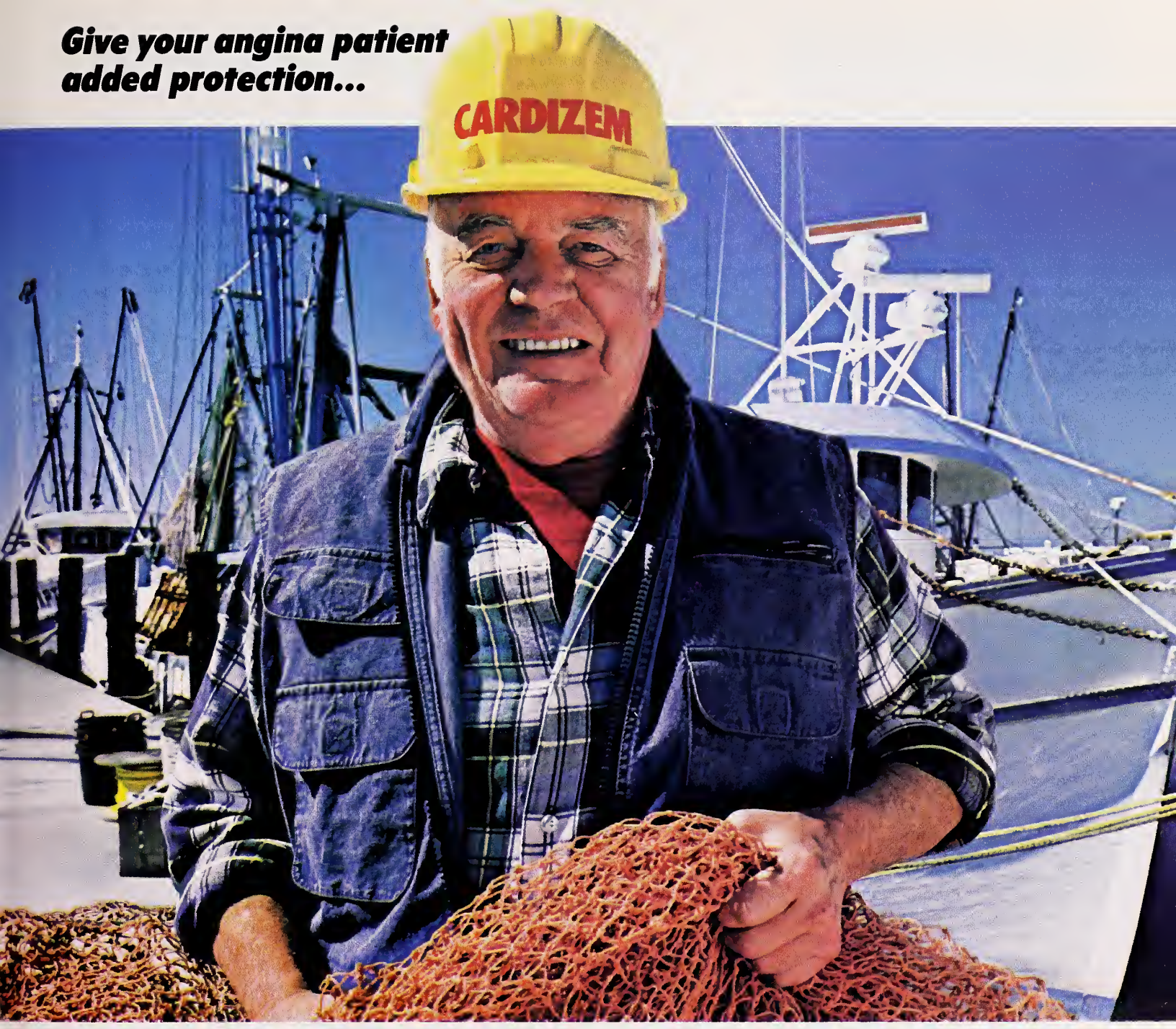
In answer to the question, "What do we do once we are there?" — simply being there is usually quite enough. I have never been bored, since there are always more things to do than I can possibly find time for. Typical choices include fishing, taking pictures, looking at the clouds, walking to the top of the nearest mountain for a better view, watching the chipmunks, throwing rocks, swimming, and learning about things around you. It is certainly possible to enjoy the wilderness without knowing the names of anything, but I think that it is more fun if you do, and there is a lot to be learned about any area that you may be visiting. Birds, trees, flowers, local geology, and mammals are easily identified with light, easy to use guides, and for some parts of North America, a single Sierra Club guide will cover all of these topics.

Regrettably, there are also a few less enthralling aspects of wilderness travel, such as sore muscles, wet feet, annoying bears, giant mosquitoes, swampy up-hill trails, gales that blow in your face, days when it is absolutely going to rain forever, fires that will not burn, beautiful maps that are utterly wrong, and vital portage trails that should be obvious but have totally vanished. All these "character building" trials are well worth enduring but it does help to expect and give some thought to preparing for them ahead of time.

It may be only once or twice a year that the most of us can hope to get into the wilderness, but after we have been there a few times, there is a definite "anamnestic response" associated with even brief subsequent contact with the woods closer to home. A walk in the backyard, a half-day hike over Kennasaw Mountain or along the Chattahoochee, or a weekend in North Georgia will not only permit escape from the telephone but will also help to recharge the spirit by reminding us of past pleasures and encouraging us in the happy contemplation of future wilderness trips. We may not always be stronger, braver, or wiser for our experiences in the wilderness, but we will almost surely be a great deal happier, and that's worth a lot!

William E. Mitchell, Jr., M.D.
General Surgeon
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FEWER SIDE EFFECTS IN ANTIANGINAL THERAPY

BRIEF SUMMARY

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist).

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM (diltiazem hydrochloride) in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered.

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

CARDIZEM 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other. Issued 4/1/84

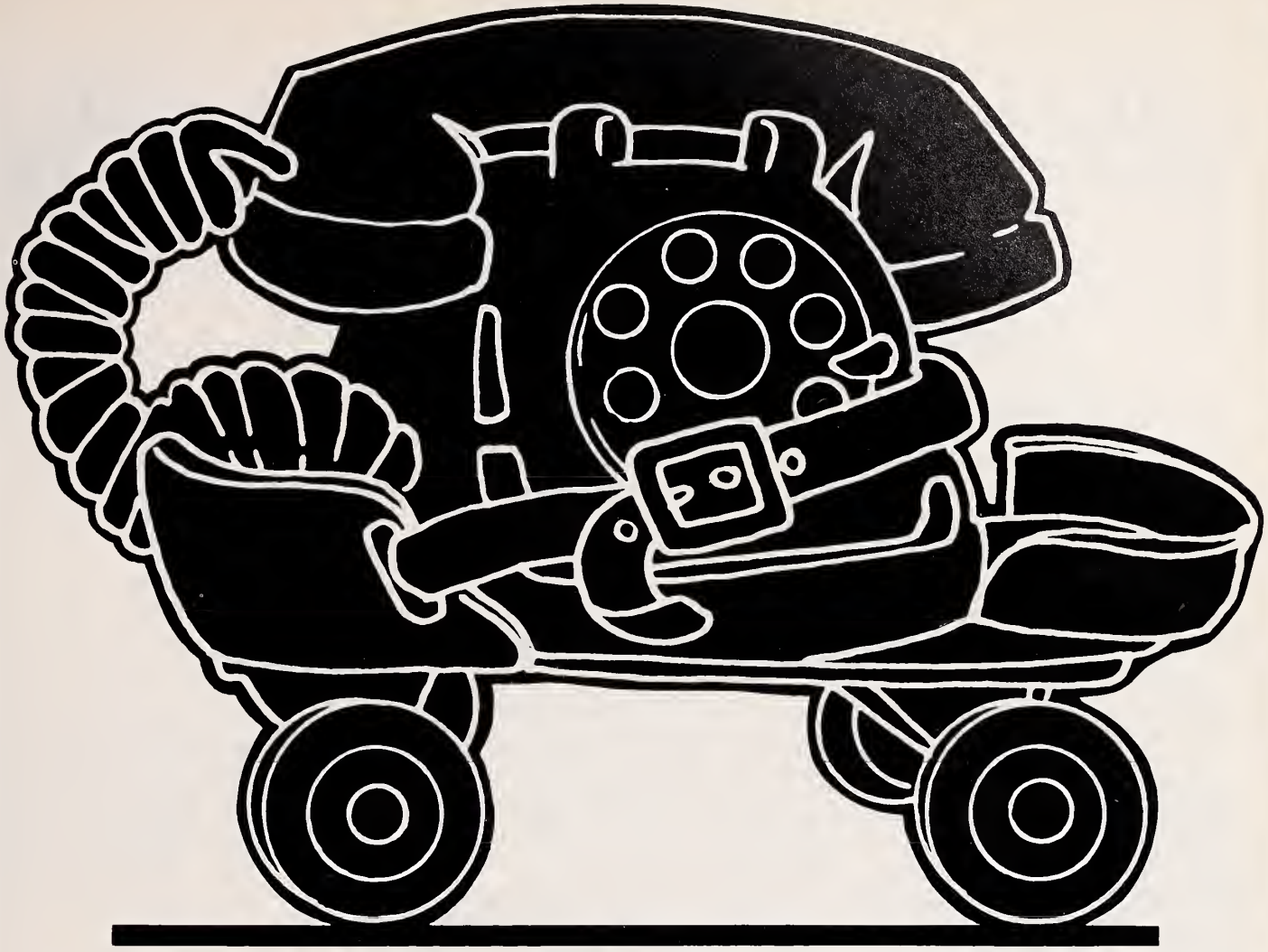
See complete Professional Use Information before prescribing.

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HEAT-RELATED ILLNESS AND DEATH PREVENTION PROGRAM

THOMAS W. McKINLEY, M.P.H., R. KEITH SIKES, D.V.M., M.P.H.,
DAVID S. GODFREY, M.P.A., F. D. STARLING

An evaluation of a program implemented in Richmond County.

Abstract

Heat-related illness (HRI) and heat-related death (HRD) rates were lower in Richmond County during the summer of 1985 than in Bibb County. This difference occurred despite the fact that temperatures were often higher in Richmond than in Bibb. The combined effects of a control program consisting of local news media coverage and telephone notification to service providers to the poor and elderly during periods of high heat stress are believed to have been largely responsible for the lower rates in Richmond. There was no organized control program in Bibb County. Individual effects of different components of thle Richmond County control program could not be determined.

Introduction

In the fall of 1981, a high school athlete died in Richmond County from heat stroke during football practice. This death stimulated considerable interest in heat-related illness (HRI) in Richmond County. As a result of this interest, the Richmond County Health Department was able to obtain local funding to purchase a wet bulb globe temperature instrument (WBGT) for use in measuring environmental heat stress. Heat stress index readings were made available to athletic coaches and other interested parties in the summer and fall of 1984; however, no evaluation was made to determine the effectiveness of this procedure.

In May and early June 1985, a consortium was formed in Richmond County consisting of groups interested in preventing HRI and HRD among the poor and elderly who are especially vulnerable to the effects of heat stress.[1, 2] The consortium, known as the Central Savannah River Authority (CSRA) Energy and Aging Consortium, developed a network through which to provide information on the level of heat stress to elderly and low income target groups, and, if necessary, to provide air conditioned emergency shelters. The Georgia Energy and Aging Consortium, which consists of a representative from the Atlanta Gas Light Company, a representative from the Agricultural Extension Service, and two representatives from the Georgia Department of Human Resources, served as a catalyst in establishing the CSRA Energy and Aging Consortium. In order to evaluate program effectiveness, cases of HRI in Richmond County were compared to cases in Bibb County which did not have a program.

Mr. McKinley and Dr. Sikes are with the Office of Epidemiology, Division of Public Health, Georgia Department of Human Resources; Mr. Godfrey is with the Consumer Information Department, Atlanta Gas Light Company, Atlanta; and Mr. Starling is with Environmental Health, Richmond County Health Department, Augusta.

Send reprint requests to Mr. McKinley, Office of Epidemiology, Georgia DHR, 878 Peachtree St., Atlanta, GA 30309.

Methods

The Sociology Department at Augusta College assisted in identifying various agencies and groups providing direct services to the elderly and low income target population. Representatives of the agencies and groups were invited to a meeting on June 12, 1985. The purpose of the meeting, which was sponsored by the Georgia Natural Gas Company, was to provide information and training on heat stress and to enlist the support and assistance of those present to work with their clients and the community to prevent heat-related illness. The meeting was attended by 67 persons representing 70 agencies.

Several agencies in the consortium agreed to perform certain key tasks in order for the network to function. The Richmond County Health Department agreed to provide notification to the Economic Opportunity Authority (EOA) Office and the Richmond County Emergency Management Agency when heat stress for

Table 1: Heat Stress Categories for High Risk Individuals

Category	*WBGT Index**	*Activities*	*Recommended Action*
I	78-81.9	Physical exertion may cause heat exhaustion or heat stroke. Caution should be taken.	No action necessary.
II	82-84.9	Use discretion in planning physical activity. Limit intensity of work and exposure to sun.	Monitor heat conditions for possible activation of system.
III	85-87.9	Exercise and physical activity should be cancelled. Outdoor activities in the sun should be avoided.	Heat shelters should be used at this time for highest risk group.
IV	88-Above	Activity and work should be cancelled.	Heat shelters should be used for all high risk groups.

* This index is based on the formula 0.7 WB + 0.2 BG + 0.1 DB. Readings were taken at the Richmond County Health Department.

high risk groups reached categories III or IV (see Table 1). These two agencies, in turn, agreed to initiate a telephone calling chain to alert all participating service providers to contact vulnerable clients and check on their condition. The County Emergency Management Agency also set up six air conditioned shelters to be used if needed.

Table 2: Heat-Related Illnesses and Deaths by County and Year, Georgia, 1981-1985

	Heat-Related Illness		*Heat-Related Death*	
Year	*Richmond*	*Bibb*	*Richmond*	*Bibb*
1981	30	7	4	4
1982	7	0	0	0
1983	36	49	0	2
1984	11	41	0	0
1985	2	26	0	3
TOTAL	86	123	4	9

"The combined effects of a control program are believed to have been largely responsible for the lower heat-related illness and death rates in Richmond County compared to those in Bibb County."

Heat-related illnesses (HRIs) and heat-related deaths (HRDs) were reported to the Office of Epidemiology, Division of Public Health, Georgia Department of Human Resources through a special statewide surveillance system established in the summer of 1981. HRIs and HRDs were defined as illnesses or deaths attributed to heat as recorded in hospital or medical examiner records. Conditions include heatstroke, heat exhaustion, and heat cramps as well as other diagnoses such as heart attack when attributed to heat. Heatstroke was defined as having a body temperature of 106°F or more either before or after death, or having a documented antemortem temperature of 105°F or more with evidence of anhydrosis and/or altered mental status (confusion).

For the purpose of evaluation, reports of HRIs and HRDs from Bibb County were chosen for comparison with reports from Richmond County. Bibb is similar to Richmond in many respects but did not have a program on HRIs and HRDs. The 1984 projected population of Bibb County was 154,923, compared to 192,121 in Richmond.[3] Approximately 40% of the population in both counties is black; age distributions are similar. Both counties have a major medical center.

Results

Heat-related illnesses (HRIs) and heat-related deaths (HRDs) for the 5-year period 1981-1985 are shown for Richmond and Bibb Counties in Table 2. HRIs tended to decline in both counties from 1983 to 1985, but the decline in Richmond was considerably sharper than in Bibb (Figure 1). Moreover, no heat-related deaths were recorded in Richmond from 1983 through 1985, while five were reported in Bibb.

In 1981, the relative risk of HRI in Bibb County was approximately one-quarter the risk in Richmond County (Table 3). However, the pattern reversed beginning in 1983. The relative risk of HRI was higher in Bibb than Richmond in 1983 and became progressively higher in 1984 and 1985.

Fewer HRIs and HRDs occurred in Richmond County than in Bibb during the summer of 1985, despite the fact that slightly higher ambient temperatures were reached in Richmond in 14 of the 18 weeks from April 27-August 31, 1985 (Figure 2). During this time, Richmond County experienced 28 days when a temperature of

FIGURE 1
CASES OF HEAT RELATED ILLNESS BY COUNTY AND YEAR

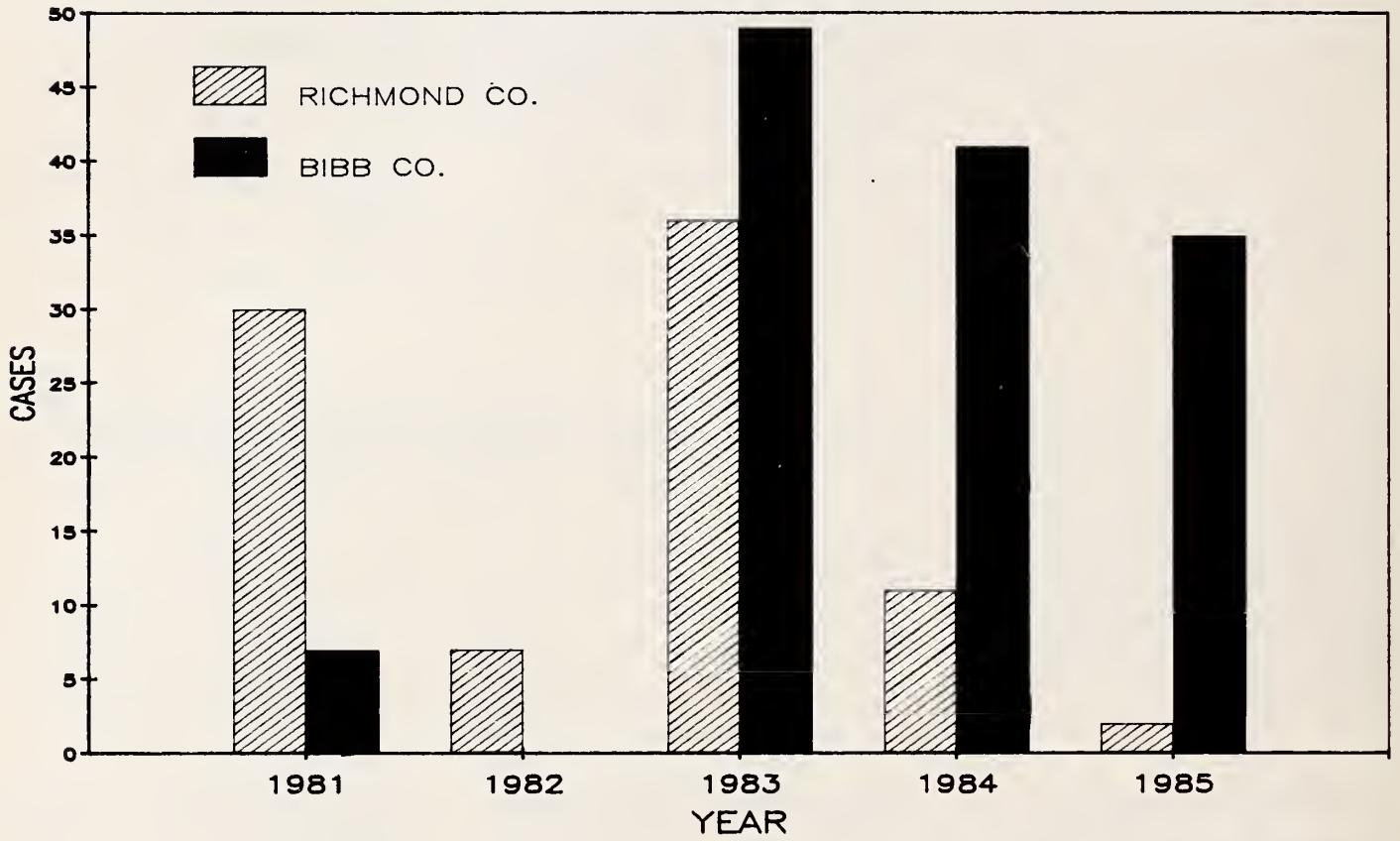


Table 3: Relative Risk of Heat-Related Illness in Bibb Compared to Richmond County by Year, 1981-1985

Year	*Rate of Heat-Related Illness Per 100,000* Bibb	Richmond	*Relative Risk*	*95% Confidence Limits* Lower	Upper
1981	4.66	16.52	0.28	0.13	0.61
1982	0	3.85	*ND	*ND	*ND
1983	31.87	19.00	1.68	1.10	2.57
1984	26.46	5.73	4.62	2.52	8.46
1985	16.66	1.03	16.21	5.58	46.61

* Not done, since no cases of heat related illness were reported in Bibb County during the summer of 1982.

Table 4: Heat Stress Index of III or Higher by Date, Richmond County, 1985

Date	*Heat Stress Index*
6/6/85	IV
7/16/85	III
9/10/85	III
9/11/85	IV

95°F or higher was reached, compared to 20 days in Bibb County.

The summer of 1985 was generally cooler than previous summers. A heat stress index of III or greater was reached in Richmond on only 4 days (Table 4). The telephone calling chain was initiated on 3 of the 4 days, but emergency shelters were never actually utilized.

Discussion

Based on data presented in Tables 2 and 3, it appears that increased public awareness following the death of a high school athlete from heat stroke

FIGURE 2
MAXIMUM TEMPERATURE DURING WEEK ENDING BY COUNTY, 1985

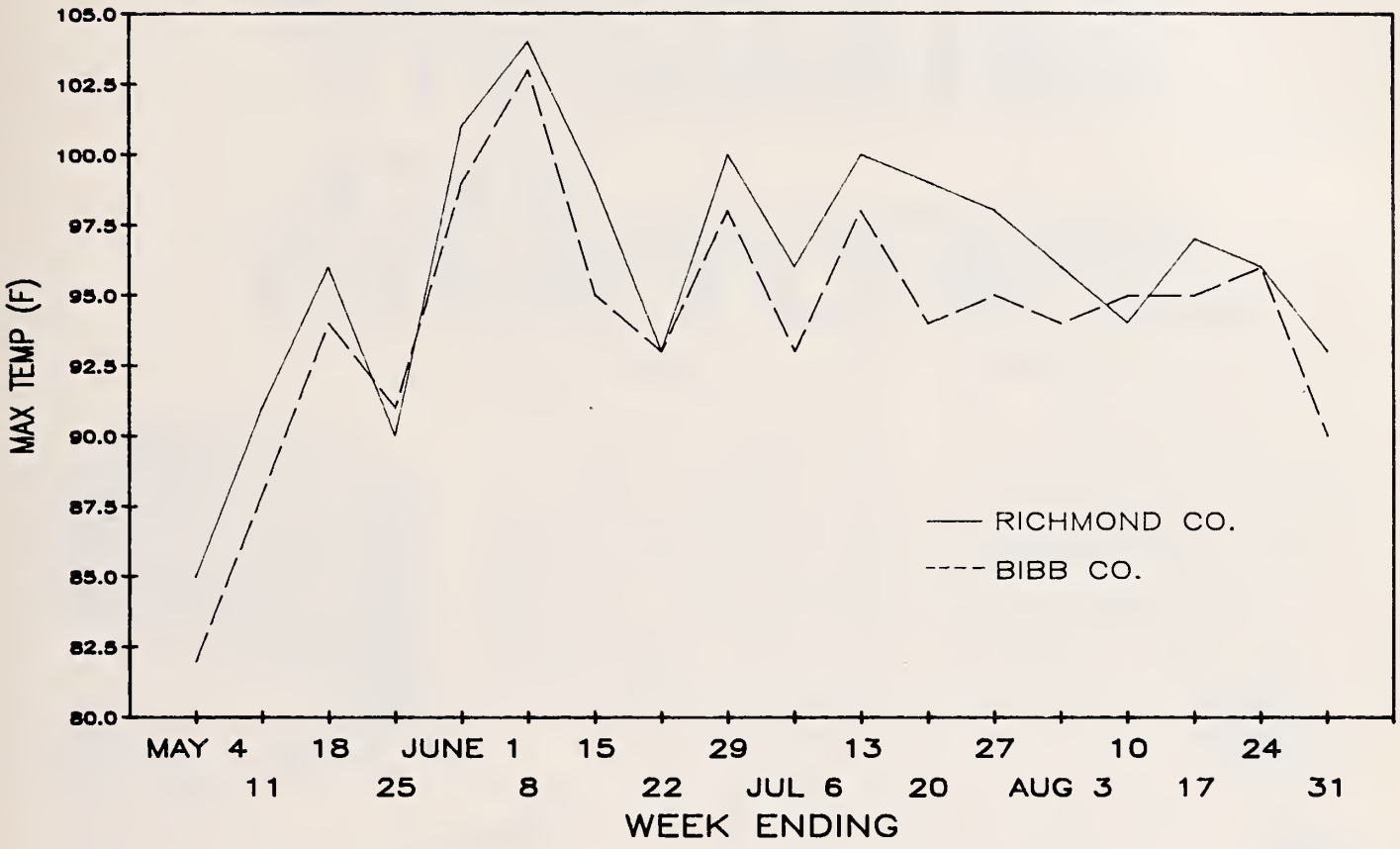


Table 5: Heat-Related Illness and Death per 100,000 by Sex and Relative Risk of Male/Female Georgia, 1981-1985

Category	Rate per 100,000 Female	Rate per 100,000 Male	Relative Risk	95% Confidence Limits Lower	95% Confidence Limits Upper
HRIs	3.37	7.40	2.19	1.98	2.44
HRDs	0.18	0.47	2.57	1.67	3.96

Table 6: Heat-Related Illness and Death Per 100,000 By Age and Relative Risk Older/Younger Georgia, 1981-1985

Category	Age Group 20-50	Age Group ≥60	Relative Risk	95% Confidence Limits Lower	95% Confidence Limits Upper
HRIs	6.72	9.11	1.36	1.20	1.53
HRDs	0.21	1.38	6.59	4.41	9.83

plus a program to notify athletic coaches and others of the heat stress index resulted in a significant reduction in HRIs in Richmond County during the summers of 1983 and 1984. Further reductions were realized in 1985. Part of this reduction is believed to have been related to activities of the newly formed consortium.

During the 5-year period 1981-1985, there were 1765 HRIs and 92 HRDs reported in Georgia. Analysis of these data indicated that HRIs and HRDs occurred more frequently among males, older persons, and blacks (Tables 5, 6, and 7). It was not possible to analyze these data by income level.

In Richmond County, the 1985 HRI and HRD control program was aimed primarily toward (1) identifying groups providing services to the poor

Table 7: Heat-Related Illnesses and Deaths Per 100,000 By Race* and Relative Risk Black/White Georgia, 1983-1985

Category	Race		Relative	95% Confidence Limits	
	White	Black	Risk	Lower	Upper
HRIs	5.57	12.68	2.28	1.99	2.62
HRDs	0.21	1.14	5.49	3.21	9.38

* Race was not recorded prior to 1983. Excludes 56 cases reported during or after 1983 for which race was not known.

"In May and early June, 1985, a consortium was formed in Richmond County consisting of groups interested in preventing heat-related illness and death among the poor and elderly who are especially vulnerable to the effects of heat stress."

"The news media in Richmond County increased general public awareness of the risk of heat-related illness or death through news coverage and routine spot announcements of a heat stress index derived by the local weather service."

and elderly, (2) training key individuals from these groups regarding the risks of heat stress, (3) establishing a chain of notificatioin during periods of high heat stress, and (4) setting up emergency air conditioned shelters. In addition, the news media in Richmond County increased general public awareness of the risk of heat-related illness or death through news coverage and routine spot announcements of a heat stress index derived by the local weather service. These activities appear to have contributed to a lower level of HRIs and HRDs in Richmond County than Bibb County during the summer of 1985. The specific impact of different elements of the control program could not be determined.

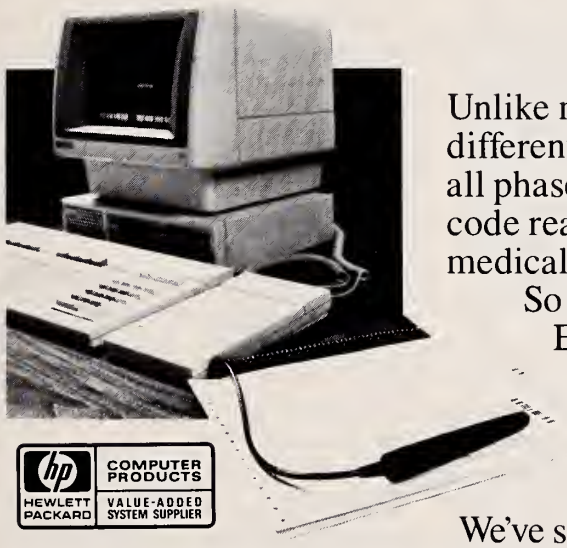
Acknowledgements

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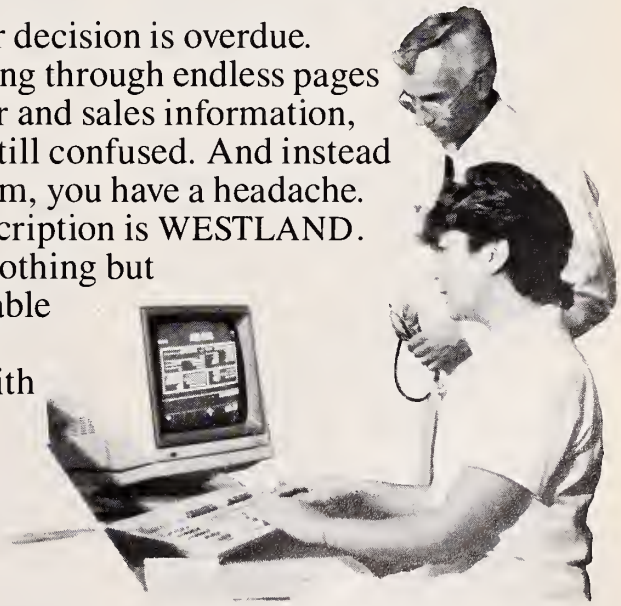
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TORT REFORM FROM AN INSURANCE PERSPECTIVE

WARREN C. LEVY

IN MY ROLE at Insurance Information Institute, I am aware not only of the medical malpractice situation, state by state, but also of what's happening to day care centers, product manufacturers, municipalities, accountants, architects, hotel and conference centers, even attorneys. The list goes on and on. My goal is to try to bring this national picture into clearer relief than just statistics will allow.

—According to government reports, amusement parks have become safer. But lawsuits and their threat may drive smaller operations out of business.

—Similarly, while the safety record of private aircraft improves, product liability suits increase with what the General Aviation Manufacturers Association described as "exponential growth in settlements, judgments and legal costs."

—As many of you may know, G. D. Searle will withdraw its two IUD products from the U.S. market — despite continuing *government* sanction of their safety. This will remind you of the problems surrounding childhood vaccines. While those products are safe, they aren't foolproof, and statistically they have a "failure" rate known to all.

—In recent years, lawsuits against public officials have increased about 50%. One study showed 28% of state and local governments have lawsuits against them.

"The public has lost perspective, too often acting intolerantly toward adverse results. If something goes wrong, someone is to blame."

—Closer to home, 60% of all ob/gyns have been sued once in their careers and 20% sued more than once.

I have a purpose in this litany. We hear day in and day out from many attorneys that the purpose of all this litigation is to keep you from bollixing things up along with the municipalities, amusement parks, aircraft manufacturers — everyone.

I'd like to know something: why are obstetricians, neurosurgeons, and orthopedists, in particular, such lousy doctors, needing so much policing by the legal profession? Or is it just possible that it's easier, and more profitable, to sue them than almost anyone else?

Mr. Levy is Vice President for Field Service of the Insurance Information Institute, a professional service association for the insurance industry, specializing in public relations and information. In addition to directing 10 field offices across the nation, Mr. Levy serves as Project Coordinator of the National Symposium on Civil Justice Issues. Send reprint requests to him at Insurance Information Institute, 110 Williams St., New York, NY 10038.

Does the fact that 50% of ob/gyns in New York have been sued more than once — compared to that 20% in the U.S. — say something terrible about *doctors* in New York? I don't think so. I think it says something more about attorneys and our lawsuit problems.

Let's make no mistake. The insurance industry believes in the tort liability system in concept. The policing effect is real. Some doctors, some insurance companies, and others are sued simply because they deserve to be. Medical practices, insurance claim handling procedures, and so much else *have* improved. But the litany I went through illustrates something else. The contributions of the plaintiffs' bar perhaps *have gained a force of their own, with the policing role forgotten and litigation coming out of reflex and because it's a job.* Our task is to restore balance to the system.

Here's one place to start: A prominent, highly respected plaintiffs' attorney recently was reported as saying: "Malpractice is two things — an error and a serious injury." That seems to suggest — and so does much of the litigation taking place — that *errors* are malpractice. How long can society withstand such a withering standard?

How did we get here?

Trend #1 — The public has lost perspective, too often acting intolerantly toward adverse results. If something goes wrong, someone is to

blame. In particular, the medical profession's success has elevated expectations.

A serious issue must be raised here: When does an error or a misjudgment signify malpractice? In addition to holding down the costs of insurance and litigation, that question begs an answer. Your patients need the answer. You need the answer.

You are under enormous pressure as it is. Should we hold it over your heads that we expect you to be error-free, judgment perfect? And, what's the medical effect of all the warnings you must give your patients?

" "Compensating the unfortunate is not such a standard, and it's not the purpose of tort liability. " "

Can we say, if experts are called in from hundreds of miles and proceed to argue for a day or two in court about the best course of action or the interpretation of key data, *that the doctor who had to make the quick, on-the-hot-seat decision so vigorously debated can be considered negligent?*

Let's also look at our cities, our towns. How perfect can they become? Any city or town has all sorts of hazards which, given the right tragic circumstances, will lead to injury or death. Today we have superb tools to *retrospectively* review what happened and measure the risk which existed. But none of our towns and cities have the resources to *prospectively* identify, measure, and *eliminate* all risk. Under such conditions all cities and towns have from scores to thousands of lawsuits waiting to happen.

Trend #2 — In many cases, we have demonstrated that we are *not interested in negligence at all.* We seek *compensation* for the unfortunate. Of course, that can be carried to extremes, such as the Redding, California, judge who awarded a young man $260,000 and $12,000 a year because the school district didn't post adequate warnings near a skylight. Never mind that the young man was on the roof to steal high intensity lights. But, absurd judgments like these do take their toll. They introduce gross uncertainty into the system. This uncertainty allows plaintiffs' attorneys with sympathetic clients to make heavy demands and get settlements despite a lack of merit, because it's feared the courtroom may produce a worse result.

But the issue society must address is deeper, more basic. Tort liability must be based on negligence. There must be standards which can be understood by everyone. Compensating the unfortunate is not such a standard, and it's not the purpose of tort liability.

Frankly, the problem is evasion. We are not facing up to a basic *public policy* decision: what do we do about the unfortunate — victims of adverse results for which *no one* is to blame? These questions must be addressed in public policy forums. Otherwise, what we are really doing is establishing *an indirect tax.* The liability premiums paid to compensate when there is no negligence should be viewed as a form of taxation.

Trend #3 — The great public attention now being paid to the liability insurance market has given us the chance to raise the issue that perhaps this tax burden has gotten out of hand. Perhaps we have lost track of the impacts of all this litigation:

** Important areas of our society are virtually under siege of litigation and its dollar threat. Members of the plaintiffs' bar will argue that overall statistics don't show such a crisis. Others point out that whatever the more verdicts which ignore negligence, incidence statistics show, there are more expensive verdicts and settlements and staggering legal costs.*

This much is *clear and demonstrable. For those with the deep pockets, for those operating in high-risk, high-visibility areas with hazards we've learned to measure better than ever, there's a tort litigation flood.*

" "The great public attention now being paid to the liability insurance market has given us the chance to raise the issue that perhaps this tax burden has gotten out of hand. " "

** That flood has changed the way we live. To some extent, that's for the better and the system of tort liability is meant to produce such improvement. But, when good doctors start retiring early or curtailing their practices, when good products are withdrawn from the market, when new products with inherent risks are not developed or not introduced, when good, responsible municipal leaders must divert more and more taxpayer funds to fight litigation and pay deep pocket awards, the system no longer has the balance it needs.*

** Finally, we've lost track in another fairly straightforward way. Our time and money are spent in grossly inefficient ways: (1) Too many cases take far too long to wind their way through our civil justice system. (Let's not worry about finger-pointing here because both plaintiff and defense must try to win; no one wants to get off the merry-go-round and lose.) This time-consuming litigation keeps other disputes bottled up; and (2) If all the persons injured by misfortune wound up getting compensated by huge judg-*

ments and settlements, our society virtually would have to shut down. In fact, many who are injured are not compensated at all or receive compensation at levels well below the celebrated, highly publicized cases. This unevenness raises serious questions.

That is not to suggest that we should or must ignore the basic American drive toward compassion. And we should ferret out negligence quickly and efficiently. While we're doing that, we must decide on direct and open procedures to attack misfortune: our ability to pay taxes and exercise charity will directly measure what we can afford to do. And the benefits will be more broadly available.

On your program today, others will discuss with you very specific proposals to respond to these trends.

"In recent years, lawsuits against public officials have increased about 50%. One study showed 28% of state and local governments have lawsuits against them."

I do want to observe, however, that your leadership has concluded wisely that efforts to improve the civil justice system should be the work of a coalition. Not only is that more effective politically, but it also simply communicates to the public that all these important, credible groups and individuals share the same concerns.

I do want to close with a review of the plaintiffs' bar's button theme: *Support Justice For All.*

Some plaintiffs' lawyers *genuinely* want to make sure that changes in our system aren't made which limit necessary access to the courts of persons injured by negligence. That's something we should all keep in mind.

But we should strongly combat the notion that the organized plaintiffs' bar tries to propagate, that theirs is the high road — the pro-consumer road, the justice for all road.

Let's take a look at what I mean:

—In legislature after legislature across the nation, the plaintiffs' bar vociferously fights auto no-fault plans. These plans, when properly designed, allocate scarce resources more efficiently among those in need than the straight tort system. It promotes the greater public good.

—How about medical malpractice? As defensive medicine — frequently unnecessary steps taken for legal and not medical purposes — expands, the cost of medicine increases. Who is hurt? Everyone, but especially the lower-income consumer.

—Is it really "justice for all" that drives plaintiffs' lawyers when they decide on which cases to take? In some cases, yes it is, and that's important to remember. But the litigation process has become so time-consuming and expensive, that let's wonder together what happens to everyday consumers whose damages sought are limited, especially if theirs is a tough case. Does the economics of the contingency system favor these folks? Or would simpler, less enriching systems, help them more — alternatives to litigation, expeditious court procedures, other methods of attorney compensation?

—Numerous legislative battles throughout the U.S. suggest one theme: when reforms are proposed which will deliver justice more quickly, more evenly, *and* more widely, who opposes those reforms? Not doctors. Not insurance companies. It's the same group wearing buttons about "justice for all."

Let's not cede the pro-consumer ground to the plaintiffs' bar. The public doesn't really buy the argument. But the public needs your help.

While the public believes there is a litigation flood and attributes much of it to actions — unwarranted actions — by attorneys, that same public doesn't understand the system well enough to help you fight for specific reforms.

And, the plaintiffs' bar is adept at deflecting specific reform proposals.

You can help. As physicians, you have a high level of public confidence and respect. Not only does the public need to know there is a lawsuit flood, it needs your help to understand:

** How to help the unfortunate compassionately without unwarranted litigation.*

** How it hurts most of us to turn the tort liability system into a lottery.*

** How to avoid turning the tort liability system into one which threatens the good performer as much as the negligent one.*

** How to improve the tort liability system without unwarranted limits on access and the ability to recover damages.*

But today, one of our toughest tasks is to assure the public which fears a personal tragedy which would leave it financially broken. Yet we know how to do this.

"Is it really 'justice for all' that drives plaintiffs' lawyers when they decide on which cases to take? In some cases, yes it is, and that's important to remember."

It's not an easy task, and plaintiffs' lawyers campaigns try to frighten the public, create a fear of being left unprotected. We must help the public overcome that fear and, at the same time, suggest that the reforms we propose mostly threaten the financial health of one group — plaintiffs' attorneys whose caseloads have ventured far from the traditional role of rooting out negligence.

We must patiently explain our case to consumers. Our long-term progress will depend on it. It makes no sense that as the triumph of the medical profession grows, so does its torment by litigation. That makes no sense and we need to say so and when we do we will be better understood and more effective. ■

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SYDENHAM'S CHOREA: A COMMUNITY HOSPITAL EXPERIENCE

LEONARD S. WOJNOWICH, M.D., JAMES G. ALEXANDER, M.D.

It is generally believed that the incidence of rheumatic fever and one of its major manifestations, Sydenham's chorea, has been on the decline for the last several decades. We present two cases of Sydenham's chorea that occurred during a one-year period, and describe the clinical findings, etiology, pathophysiology, and treatment of this very interesting entity.

Introduction

DURING THE last several decades, the epidemiology of rheumatic fever has markedly changed. According to the literature, it is difficult to determine the exact incidence of rheumatic fever and rheumatic heart disease in the world today, partly because rheumatic fever is not a uniformly reportable disease and because mortality statistics aren't uniformly available. However, it is generally believed that the incidence and severity of rheumatic fever is on the decline.[1] As rheumatic fever is on the decline, so is the presentation of one of its major manifestations, i.e., Sydenham's chorea.[1] We report two cases of Sydenham's chorea from a community hospital in Savannah that presented within a 1-year period.

CASE PRESENTATION: Patient I — This patient, an 11-year-old white female, presented with the chief complaint of decreasing coordination (dropping objects, falling down, bumping into walls, etc.) over the past 2 weeks. The patient described a history of sore throat 5 weeks prior to admission, but denied fever and was treated only symptomatically with throat lozenges. The patient also complained that she had no control of her arms, specifically, she had uncontrollable jerking, especially of the right arm, with weakness and dizziness on arising in the morning. The mother reported that the patient was very irritable and would cry "at the drop of a pin."

"The etiology of Sydenham's chorea is difficult to establish and is multivaried in nature."

Previous medical history was remarkable only for the usual childhood illnesses. The child demonstrated normal growth and development. In particular, there was no history of arthralgias, nodules, rash, or previous rheumatic fever. There was also no history of any medication or ingestion of any substances.

Physical examination demonstrated a generally alert and cooperative child with obvious problems with coordination. Vital signs included a temperature of 98, pulse 86, respirations 20, and blood pressure 110/60. HEENT was entirely within normal limits without any evidence of tonsillar erythema or exudates. Her neck was supple, there was no adenopathy noted. Her lungs were clear to auscultation and percussion. The heart demonstrated a regular rate and rhythm, with a grade II/VI systolic ejection murmur best heard along the left lower sternal border and apex. The abdomen was soft, nontender, without organomegaly. Musculoskeletal examination revealed good range of motion in all joints without clubbing, cyanosis, or edema. Skin examination revealed no rashes or nodularity. Neurological examination revealed the patient was oriented times three and demonstrated normal speech. Cranial nerves 2-12 were grossly within normal limits. Motor

Dr. Wojnowich is a family practitioner; Dr. Alexander is a resident in the Dept. of OB/GYN at Memorial Medical Center in Savannah. Send reprint requests to Dr. Wojnowich at 361 Commercial Dr., Savannah, GA 31406.

examination revealed normal strength in bulk and tone of muscles. The child did demonstrate active choreiform movements of all extremities, characterized as rapid, jerky, forceful movements with a grotesque and exaggerated character, appearing purposeful in nature, but with no real coordination. Sensory examination was intact. Cerebellar examination revealed no limb or trunk ataxia with adequate heel-to-toe and tandem walk. Romberg was negative, though the gait was somewhat clumsy. The deep tendon reflexes were hypoactive, and Babinski's were down going.

"Although 300 years have elapsed since Sydenham first described the disease complex which now bears his name, Sydenham's chorea still remains a poorly understood disease."

Laboratory: A CBC manifested a white count of 7,200 with 4 Monos, 31 Lymphs, 52 Segs, 13 Bands; Hemoglobin as 11.6, Hematocrit 32.7. Westergren Sed Rate was 50 (normal up to 20). Other laboratory data included a streptozyme which was positive and an ASO titer which was greater than 2,500 (upper limits of normal 166). A C-Reactive Protein was weakly positive, monospot was negative, and ANA was less than 20. A serum and urine drug screen revealed no detectable drugs. Chest x-ray was within normal limits. A throat culture was positive for Group A Beta Streptococcus; blood cultures were negative for any organisms. An electroencephalogram was read as normal for age. An EKG demonstrated a prolonged PR interval for age, ranging from .18 to .20. An echocardiogram revealed left ventricular enlargement, moderate in nature, with mitral insufficiency.

Course in the hospital: The patient was treated with Penicillin VK 250 mg P.O. t.i.d., thorazine initially at 15 mg then 25 mg t.i.d., and aspirin therapy, 10 grains t.i.d. One week after admission the sedimentation rate had dropped to 31, and 1 month after admission, the sedimentation rate had dropped to 20 at follow-up in the Clinic.

Patient II: This patient presented with a 3-4 week history of decreasing coordination. While at school and while drawing at the blackboard, the child was noted to have strange spontaneous and abnormal body movements involving the arms, face, and legs. The teacher, thinking that this was a seizure, referred the child to a local physician, who in turn referred the child to a neurologist for evaluation. Also during these last several weeks of decreasing coordination, the child's grades had dropped from generally Bs to Ds. There was no history of recent sore throat, but there was a history of an upper respiratory infection approximately 2 months prior to presentation with coryza and cough.

Previous medical history was entirely within normal limits, with normal growth and development. There was no previous history of rheumatic fever.

"Chorea occurs most commonly between the ages of 5 and 15 years and seems to be more common in girls."

Physical examination revealed a cooperative young black female with much difficulty in controlling body movements. Her temperature was 99.4, pulse 108, respirations 16, blood pressure 100/60. HEENT was essentially within normal limits except for an erythematous posterior pharynx with enlarged tonsillar pillars, though no exudates were seen. Her neck was supple, with palpable right and left posterior cervical nodes. The lungs were clear to auscultation and percussion. Her heart revealed a regular rate and rhythm, with a grade II/VI systolic ejection murmur best heard along the left sternal border. Her abdomen was soft without organomegaly. Musculoskeletal examination revealed good range of motion without clubbing, cyanosis, or edema. Skin examination revealed no rash or subcutaneous nodules. Neurologic examination revealed the patient to be oriented times three. Her speech was dysarthric secondary to uncontrolled tongue protrusions, consisting of rapid movements in and out of the mouth. The cranial nerves 2-12 were essentially within normal limits, except as mentioned above. Motor examination revealed choreiform movements. The deep tendon reflexes were hypoactive throughout, and Babinski's were downgoing.

"Antistreptococcal therapy is imperative, every patient with chorea should receive a full 10-day course of penicillin therapy."

Laboratory tests demonstrated a normal CBC, SMA 6, and urinalysis. Westergren sedimentation rate was elevated at 45 (normal up to 20), streptozyne was positive, and ASO titer was 833 (normal less than 166). Both throat and blood cultures were negative for group A Beta streptococcus. EKG was read as within normal limits. EEG was also within normal limits. Chest x-ray revealed an upper limits of normal size heart and otherwise normal. An echocardiogram revealed mildly hyperdynamic left ventricular wall motion.

Course in the hospital: The patient was treated with Pen-VK 250 mgs P.O. q.i.d., Haldol .5 mgs P.O. q4h, with marked improvement of her chorea. She also received aspirin 10 grains P.O. q.i.d. The patient was discharged to be followed in the Clinic, and approximately 2 weeks

after discharge her sedimentation rate was still elevated at 41. However, her choreiform movements had almost totally ceased.

Discussion

The term chorea stems from a Greco-Latin word implying the act of dancing. It was first applied in the Middle Ages to describe the frenzic movements of hysterical religious fanatics who made pilgrimages to the healing shrine of St. Vitus. Sydenham, in 1684, applied the term to an organically founded disease which was later shown to be associated with juvenile rheumatism. Common usage now interchanges the term St. Vitus dance and Sydenham's Chorea to refer to chorea of rheumatic origin. Although 300 years have elapsed since Sydenham first described the disease complex which now bears his name, Sydenham's chorea still remains a poorly understood disease.[2]

"A major manifestation of rheumatic fever, chorea is a disorder of the central nervous system characterized by emotional instability, involuntary purposeless movements, and muscular weakness."

A major manifestation of rheumatic fever, chorea is a disorder of the central nervous system characterized by emotional instability, involuntary purposeless movements, and muscular weakness. Chorea occurs most commonly between the ages of 5 and 15 years, with a peak incidence at around 8 or 9 years. It seems to be more common in girls than in boys after age 10. It is rare after puberty and is exceedingly uncommon after the age of 20.[1] Several studies have shown that the incidence of Sydenham's chorea is declining. In one study of 1000 patients with rheumatic fever from 1920 to 1950, 52% had chorea.[3] In another study of 240 patients with Sydenham's chorea between 1951 and 1976, only 8% of the total cases occurred after 1968.[1] Even though these studies imply that the incidence of chorea is declining, we find it interesting that in the 1980s, during a 1-year period, we encountered two cases of Sydenham's chorea in a community hospital.

The etiology of Sydenham's chorea is difficult to establish and is multivaried in nature. Although chorea is a major manifestation of rheumatic fever, it may occur by itself, without any of the other associated signs and symptoms. Chorea, as a symptom, differs from the polyarthritis and carditis of rheumatic fever, in that the latent period between an upper respiratory tract infection and the appearance of chorea may be much longer. Instead of the usual 1-3 weeks that one sees with the other major manifestations of rheumatic fever, chorea may present itself anywhere from 1-6 months later. This long latency period allows for confirmatory test of an antecedent streptococcal infection to return to normal, thus making the diagnosis of rheumatic fever difficult.

The pathology and pathophysiology of Sydenham's chorea is not completely understood. The histologic changes vary from case-to-case and are not localized to any specific area of the brain. Changes that had been found in the brain have not been able to be correlated with the clinical symptoms and neurologic findings. The cerebral pathology consists of an arteritis with cellular degeneration, hyperemic endothelial swelling, perivascular round cell infiltration, and petechial hemorrhages. Cellular changes consisting of cytoplasmic and nuclear alterations may progress to total destruction of the cell in areas scattered throughout the cortex, basoganglia, substantiae nigra, and cerebellum.[2] No typical Aschoff bodies characteristic of rheumatic fever have been found in the brain.[4] Recently, antibodies reacting with cytoplasm of the subthalmic and caudate nuclei have been discovered,[5] possibly implying an autoimmune type phenomenon. The significance of this is as yet unclear. The mechanism of the actual chorea is unknown, though it has been postulated to be related to the release of inhibitory mechanisms from the extrapyramidal or cerebellar sources.[6] Some EEG studies have demonstrated diffuse dysrhythmia, slow waves, and paroxysmal activity; however, the non-specific findings fluctuate with the clinical state of the patient and may be totally absent in mild chorea.[7] The significance of an EEG abnormality is unclear at this time.

"The cerebral pathology consists of an arteritis with cellular degeneration, hyperemic endothelial swelling, perivascular round cell infiltration, and petechial hemorrhages."

The clinical findings in Sydenham's chorea are variable. The three outstanding features involve spontaneous movements, lack of coordination, and weakness. Movements may be so subtle as to escape recognition. However, they are usually abrupt, brief, with no rhythmical nature and can affect any portion of the body, either occurring at rest or with activity, but usually disappearing during sleep. The onset of symptoms is usually gradual, the child increasingly becoming more nervous, tending to drop things, and stumbling frequently. A school teacher may often report grimacing or writing difficulties, incoherent speech, and the characteristic purposeless movements of the arms and legs. Muscular weakness is common, and the child may be unable to walk, run, or even sit up. However, movements can be so violent that the patient has to be placed in a padded crib to prevent injury. Frequently, only one side of the body may be involved in a hemiballismic

“Sydenham's chorea is usually self limiting, with complete recovery the rule rather than the exception.”

type activity. Dysfunctions of speech are often difficult to elicit. Facial expressions are also highly variable, there being a broad grin one moment followed suddenly by a grim poker face or even a tearful expression. Involvement of the tongue produces undulating jerky movements, often described as a "bag of worms." The child may often bite the tongue to keep it from protruding.

The child may also demonstrate a tendency to pronate one or both hands when they are extended overhead, the so-called "pronator sign." The characteristic hand posture consisting of wrist flexion, hyperextension of the metacarpal phalangeal joints, finger straightening and thumb abduction may be present, these forming the so-called "dishing, spoon or choreic hand." Other associated symptoms, including convulsions, central retinal artery occlusion, and papilledema, have been described in the literature.

Active carditis is found in a significant number of children whose initial complaint is chorea. The carditis is usually not severe, and indeed the signs and symptoms of cardiac involvement may be missed unless careful and repeated examinations of the heart are performed. However, long-term follow-up studies seem to indicate that as many as 25-30% of patients presenting with uncomplicated Sydenham's chorea may manifest subsequent valvular heart disease.[2]

The diagnosis of Sydenham's chorea is usually unmistakable in a child with a fully developed clinical syndrome. However, in the early stages of the illness in which the symptoms may occur gradually, the diagnosis may be exceedingly difficult and can be confused with other entities including ticks or habit spasm, hyperactivity, Wilson's disease, Huntington's chorea, and drug ingestions such as compazine, haldon, thorazine, etc. Careful history, examination, and continued observation will lead to the correct diagnosis.

Sydenham's chorea is usually a self-limiting condition with complete recovery the rule rather than the exception. The course of the illness, however, is highly variable. Symptoms in mild cases may subside in a few weeks; in more severe cases, they may last from months to years. The average case recovery is usually 3 months. Though considered benign and self limited in nature, cardiac, behavioral, or neurologic sequelae may occur.

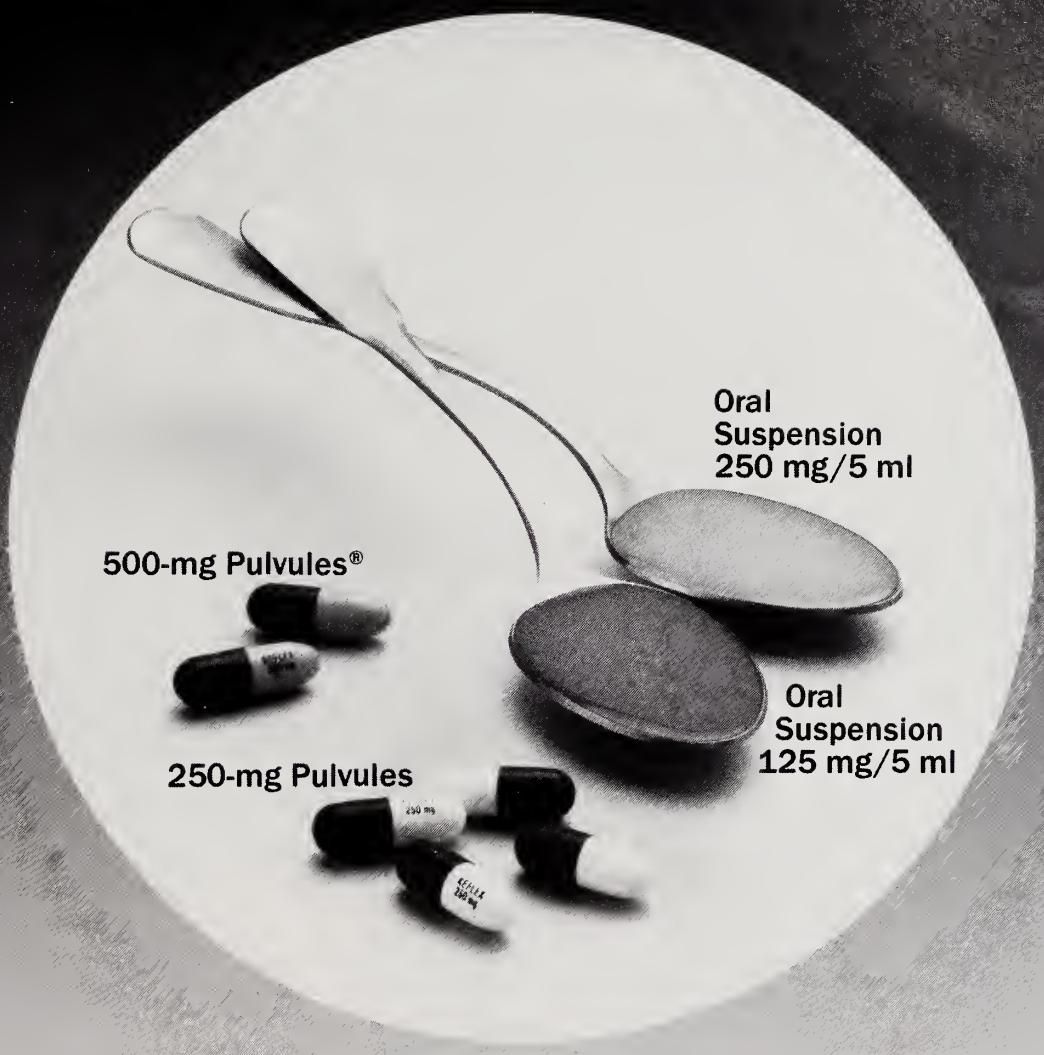
In the treatment of Sydenham's chorea, no drug has been shown to be uniformly effective. Irrespective of the therapy, because of its self-limiting nature, the symptoms will eventually subside. General measures that can be followed include removing the child from a school setting after the diagnosis has been established, and in severe cases, hospitalization may be required with precautions to prevent the patient from causing physical harm to himself. Drugs such as phenobarbitol, haloperidol and chlorpromazine have demonstrated equal effacy in helping to control the chorea. In addition to the tranquilizer therapy, antistreptococcal treatment is imperative; every patient with chorea should receive a full 10-day course of penicillin therapy, followed by a prophylactic penicillin therapy if carditis has been demonstrated.

In conclusion, we have presented two patients with classic Sydenham's chorea at a community hospital in Savannah during a 1-year period. Though the literature indicates that rheumatic fever and Sydenham's chorea seem to be on the decline, one must always remain aware of this entity, so as to arrive at an accurate diagnosis and treatment.

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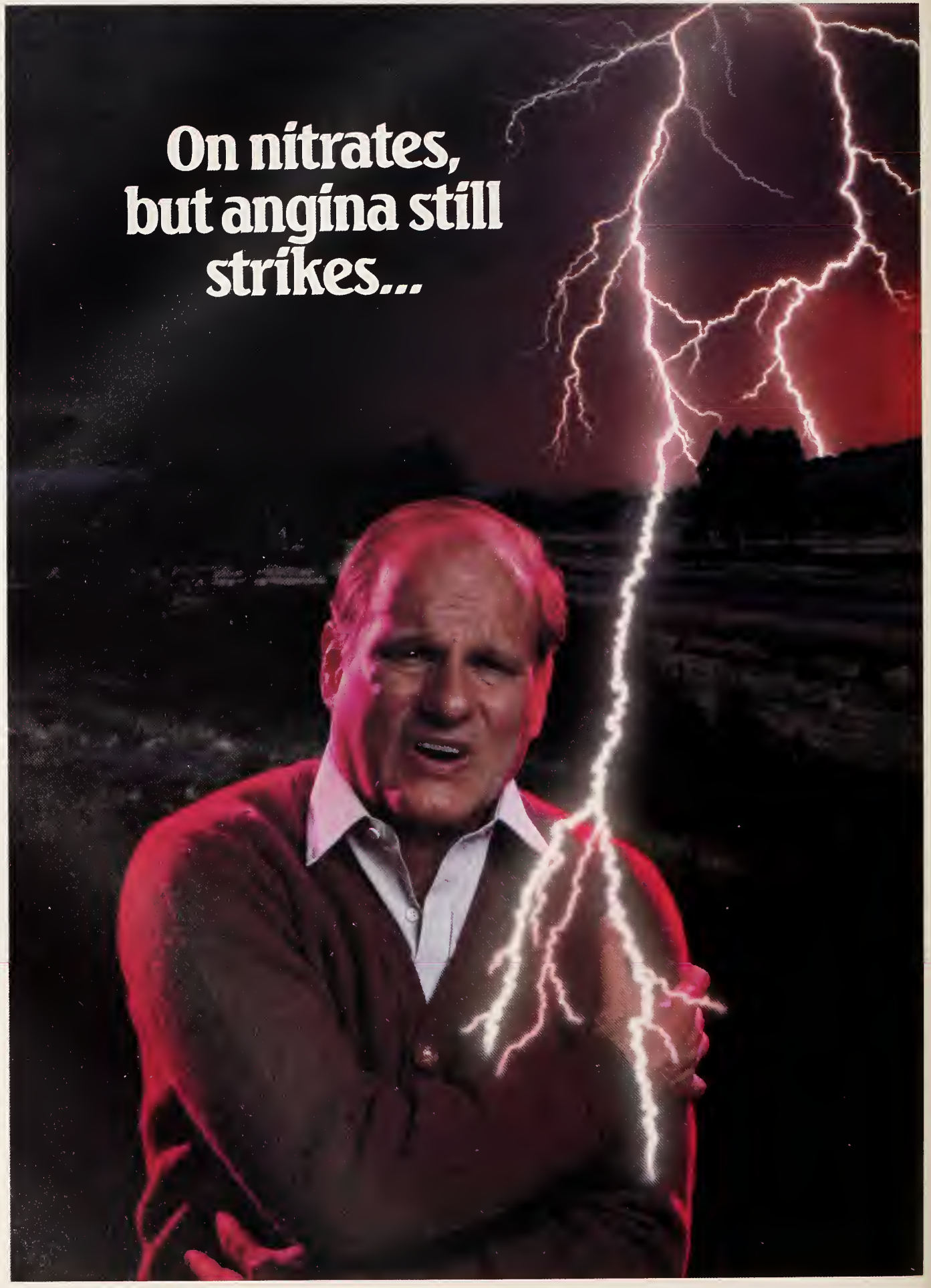
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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. 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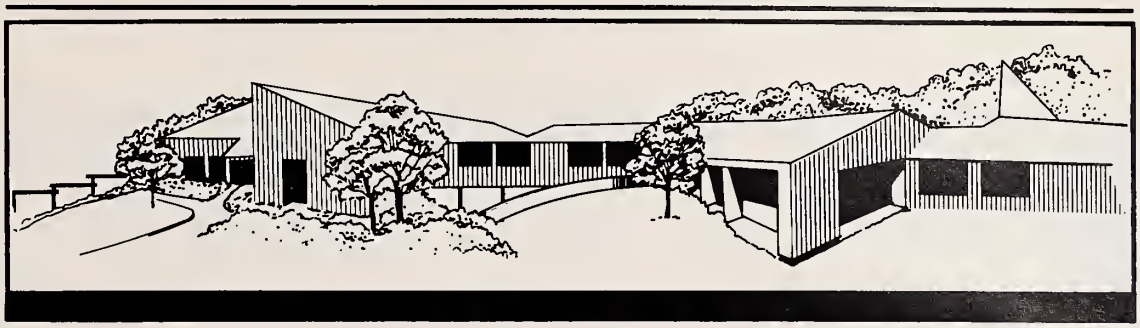
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TEENAGE SUICIDE IN COBB, DEKALB, AND FULTON COUNTIES: A PERSPECTIVE

RANDY HANZLICK, M.D.

An analysis to determine the magnitude of the problem in those counties.

Abstract

Suicide rates for teenagers ages 15 to 19 in Cobb, DeKalb, and Fulton Counties did not increase when 1980-84 data are compared to 1970-74. The rate for all teenagers was about one-half that of the general population. As with all age ranges in the general population, white males were at greatest risk among teenagers, their risk being about equal to the general population. In the tri-county area, about 10 teenagers took their own lives annually compared to approximately 180 total suicides per year. Suicide among early adolescents (ages 10-14) averaged one case per year for the tri-county area.

Teenage suicide is epidemiologically significant because of its relative incidence, which is high, rather than its absolute incidence, which is low. Accidents, and in some instances, homicide, are the only causes of death which take more teenage lives. Thus, reduction of teenage suicide may have significant impact on teenage mortality. In view of reported increases in the national teenage suicide rate, locally stable rates may speak well for local crisis intervention programs.

Introduction

THE FULTON COUNTY Medical Examiner has noted a recent increase in public inquiries concerning suicides committed by teenagers. The topic has been dealt with considerably by the television and entertainment industries, the lay press, and the medical and epidemiology literature.[1-8] Because of increased publicity and a multitude of variables, such as the source, reliability, and interpretation of suicide data, the motives for presenting it, and the diversity in definitions of the word "teenager," it is difficult to separate the magnitude of awareness from the magnitude of the problem.

The present paper analyzes suicide rates for teenagers in Cobb, DeKalb, and Fulton Counties in an attempt to specifically determine the magnitude of the problem in those areas. Emphasis is placed on what has occurred since the early 1970s, and how the local entity of suicide by teenagers fits in perspective with national suicide trends, efforts aimed at intervention, and other local, mortality related problems.

Dr. Hanzlick is Associate Medical Examiner, Fulton County, Department of Pathology and Laboratory Medicine, Emory University School of Medicine. Send inquiries to him at 50 Coca Cola Place, SE, Atlanta, GA 30303.

Methods and Definitions

For the purposes of this paper, *early adolescent* suicides were defined as those which occur in persons ages 10 to 14 years. *Teenage* suicides were defined as those committed by persons 15 to 19 years of age. Such age ranges were selected because available population data necessary for calculating rates were bracketed in 5-year intervals and because early adolescent suicides were rare relative to teenage suicides. Population data for age and race specific groups were obtained from the Georgia State Vital Records and Health Statistics Unit.

Suicide data from 1980 to 1984 for Cobb and DeKalb Counties were obtained from data issued by the Cobb/DeKalb Medical Examiner. All data for Fulton County was obtained from in-house records of the Fulton County Medical Examiner. Suicide data from 1970 to 1974 for DeKalb County, and from July 1973 to December 1974 suicide data for Cobb County were obtained from the Medical Examiner

who served those counties at that time. January 1970 to June of 1973 suicide data for Cobb County were not available in age group form due to the structure of the death investigation system at that time.

Suicide rates were calculated by the following formula:

$$\frac{(\#\ of\ Suicides\ in\ Race\ Sex\ Group) \times (100{,}000)}{(Population\ of\ Race\ Sex\ Group} = Rate/100{,}000$$

Average suicide rates for the 5-year periods 1970-74 and 1980-84 were calculated by averaging the population and number of suicides over the time period and using those two values in the above equation.

Results and Discussion

The number of suicides per year committed by early adolescents (ages 10-14) is presented in Figure 1. So few cases occurred in each county that yearly statistical analysis and rate calculations were not attempted. The number of early adolescent suicides during the 1980 to 1984 period did not increase over the number which occurred from 1970 to 1974, averaging about one case per year for the tri-county area combined. Overall suicide rates for early adolescents were low and similar during the first 5 years of the last 2 decades: about 0.97/100,000 in the 1970s, compared to 1.13/100,000 thus far in the 1980s. The numbers were so small that one less case in the 1980s, or one more case in the 1970s (which may have occurred since Cobb data were incomplete) would reverse or eliminate the observed difference.

Raw data for teenagers (ages 15-19) are presented in Figure 2. DeKalb and Fulton Counties each had fewer teenage suicides in the first 5 years of this decade than in the first 5 years of the last decade. Cobb County data were incomplete, but available data from the early 1970s appear similar to that from the 1980s.

Figure 3 illustrates suicide rates within each county and for the tri-county area combined. Suicide rates

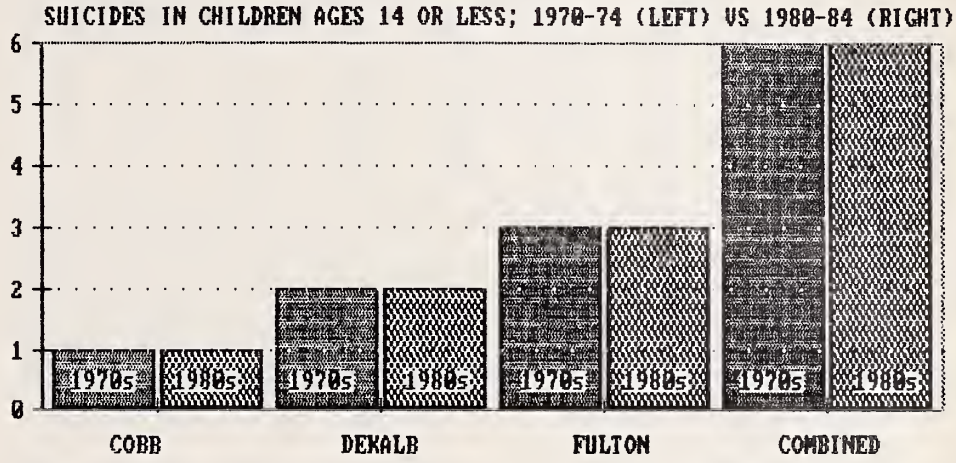


FIGURE 1

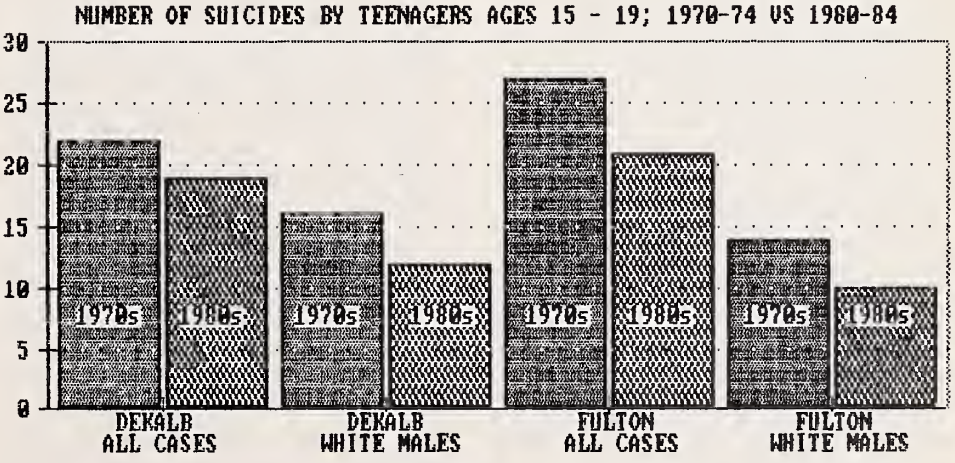


FIGURE 2

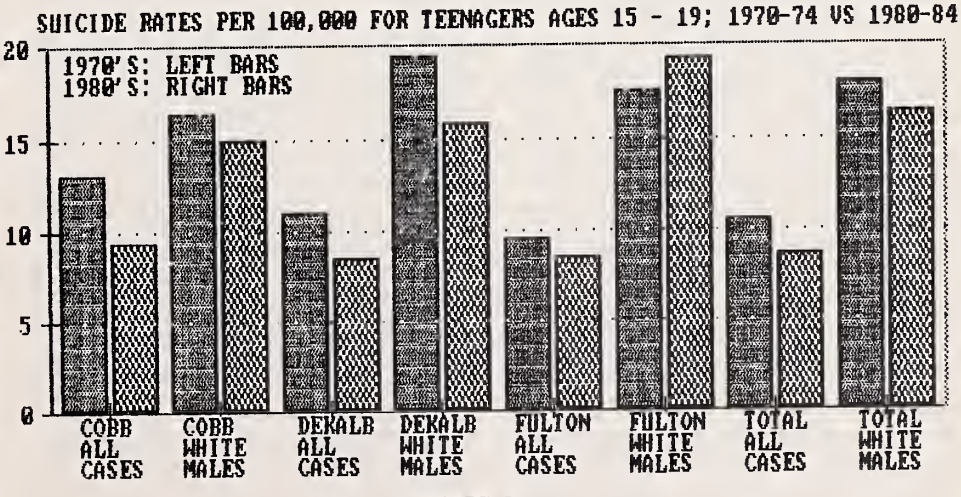


FIGURE 3

Table 1. — Suicide rates per 100,000 for all TEENAGERS ages 15-19 and white males ages 15-19 for Cobb, DeKalb, Fulton, and the tri-county area combined. 1970-1974 averages are shown for comparison to the 1980-1984 period.*

	Cobb		DeKalb		Fulton		Combined	
	All	*WM*	*All*	*WM*	*All*	*WM*	*All*	*WM*
1980	3.9	8.0	4.2	11.8	13.3	35.4	8.0	17.2
1981	3.9	8.0	13.0	25.0	4.0	17.9	7.4	17.6
1982	15.7	24.5	13.5	13.5	10.2	19.1	12.6	18.6
1983	7.9	8.3	6.9	14.0	6.3	20.6	6.9	13.9
1984	15.9	25.0	4.7	14.7	8.7	0.0	8.8	14.4
1970-74 AVG	13.1	16.4	11.0	19.5	9.5	17.6	10.6	18.0
1980-84 AVG	9.4	15.0	8.5	15.9	8.5	19.3	8.7	16.4

*1970-74 averages for Cobb were calculated using 1973-1974 data only; data were available for all years in DeKalb and Fulton. Averages were calculated by averaging the population and number of suicides, then using those two values to calculate an average rate for each five year period.

fluctuated dramatically from year to year, no doubt due to the relatively small number of cases occurring in any county in any one year. When data from all three counties were combined, overall rates for the tri-county area showed lesser year-to-year fluctuation (See Table 1). It is safe to say that suicide rates for all teenagers in DeKalb and Fulton Counties, separately and combined, were slightly lower during 1980-84 than in 1970-74. There is evidence that Cobb trends were similar, although incomplete Cobb data preclude certainty. If Cobb data were excluded from the combined county calculations, the results were essentially the same as those presented in Figure 3.

White male teenagers were the only race/sex group represented in sufficient numbers to be analyzed separately and as observed nationally, were at highest risk among teenagers.[1] As shown in Figure 3, compared to the 1970-74 time period, 1980-84 white male teenage suicide rates were slightly lower in each county separately and in the tri-county area combined, except in Fulton County where a mild increase (10%) occurred. The Cobb data must be viewed with the same cautions noted above.

To place teenage suicide in perspective, the suicide rate for all teenagers (8.7) was about one-half that for white male teens (16.4), which is slightly higher than the Fulton County suicide rate of 15.1 for all persons of all ages combined.[9] Similar statistics have been reported nationally, and the over-representation of white males among teenage suicide victims was similar to the over-representation of white males among suicide victims in all age groups.[2, 9] On the average, about 10 teenage suicides have occurred annually in the tri-county area, compared to about 180 total suicides per year.

Nationwide, suicide rates for white male teens (ages 15-19) reportedly increased by 60% between 1970 and 1980.[2] From 1970 to 1978, suicide rates for all persons 15 to 24 years of age reportedly increased by 41%.[1] Since suicide rates for persons ages 20 to 24 were about twice that of persons ages 15 to 19, lumping true teenagers with persons in their twenties may skew the data for true teenagers and result in misconception. Regardless of reported national trends, suicide rates for Cobb, DeKalb, and Fulton County teenagers so far in the 1980s have not differed substantially from the rates of the early 1970s. That observation may speak well for local counseling and intervention programs which have operated during those years and may also reflect reports that suicide rates are lower in the South than other areas.[1]

For comparison purposes, suicide rates in Fulton County for all white males, elderly white males, and white males ages 20 to 24 years averaged 34.9, 46, and 40.2, respectively, over the past 10 years, compared to 8.13 for all teens and 16.9 for white male teens.[9] A total of 117 elderly individuals and 118 persons ages 20 to 24 committed suicide during that 10-year period, compared to 44 teenagers. Homicide rates for young black males in certain definable areas of Atlanta have exceeded 200. Thus, in terms of risk, teenage suicide has been a relatively minor, less locality related, and less predictable phenomenon than violence in other age, race, or sex related groups.

"Regardless of reported national trends, suicide rates for Cobb, DeKalb, and Fulton County teenagers so far in the 1980s have not differed substantially from the rates of the early 1970s."

Nationally, perhaps the most startling feature of teenage suicide is a reported tripling of their suicide rate since 1950.[1] However, that report included persons 15 to 24 years of age, and there are a number of factors which may contribute to explaining that reported increase, only some of which relate to a real increase.[2] The author wants to emphasize that the character and quality of death investigation has changed dramatically since the 1950s. There is evidence locally and in other jurisdictions that reported increases in violent deaths (including suicide) are at least in part due to transitions from coroner to medical examiner systems, with an increase in diagnosis in addition to occurrence.[9-11] The data presented in this paper, pertaining to counties which have had similar death investigation systems since the early 1970s, and suicide rates which were apparently stable, lend some credence to such thoughts. An in-depth discussion of such issues is beyond the scope and purpose of this paper, and the

topic has been partially discussed elsewhere.[2, 7]

Hidden within the data of this paper is the fact that, in 1984, all four teenage suicides in Fulton County were committed by blacks: three males and one female. In 1985, both early adolescent suicides were committed by black males, and two of five teenage suicides were committed by blacks, one male and one female. Such a predominance of blacks during the past 2 years may be coincidental, but this certainly arouses concern and warrants further study and monitoring.

Finally, the use of guns by two-thirds of teenage suicide victims causes one to question what effect the availability of guns has on a teenager's decision to commit suicide.[1, 9]

Concluding Thoughts

Aside from its very existence and its variable incidence (which is locally low and apparently stable), other features of teenage suicide make it notable and disconcerting. Foremost is the commonly unexpected, almost mysteriously nature of many teenage suicides, and the tragedy, grief, and loss experienced by survivors. Second is the tremendous loss of potentially productive years. Third is the fact that, other than suicide, only accidents (and in some instances, homicides) take more teenage lives, other causes being far less frequent or prevalent than in older age groups. Thus, reducing suicides can have a significant impact on reducing teenage mortality. Fourth is current evidence of a ripple, clustering, permissive, or contagion effect, which, although not necessarily confined to teenage suicides, has prompted study by the CDC Violence Epidemiology Section.[5] Until proven otherwise, such findings serve as prima facie evidence that awareness of a teenage suicide, whether by word of mouth, through the media, or by acquaintance, may be dangerous to other teens with suicidal ideations or tendencies. Common-thread biologic abnormalities cannot be ruled in or out at this point. Finally, teenage suicide is troublesome because of the presently unanswerable question of how a person, who has lived relatively few years and experienced few of life's ongoing pleasures, challenges, disappointments, and frustrations, can become so isolated as to take his or her own life.

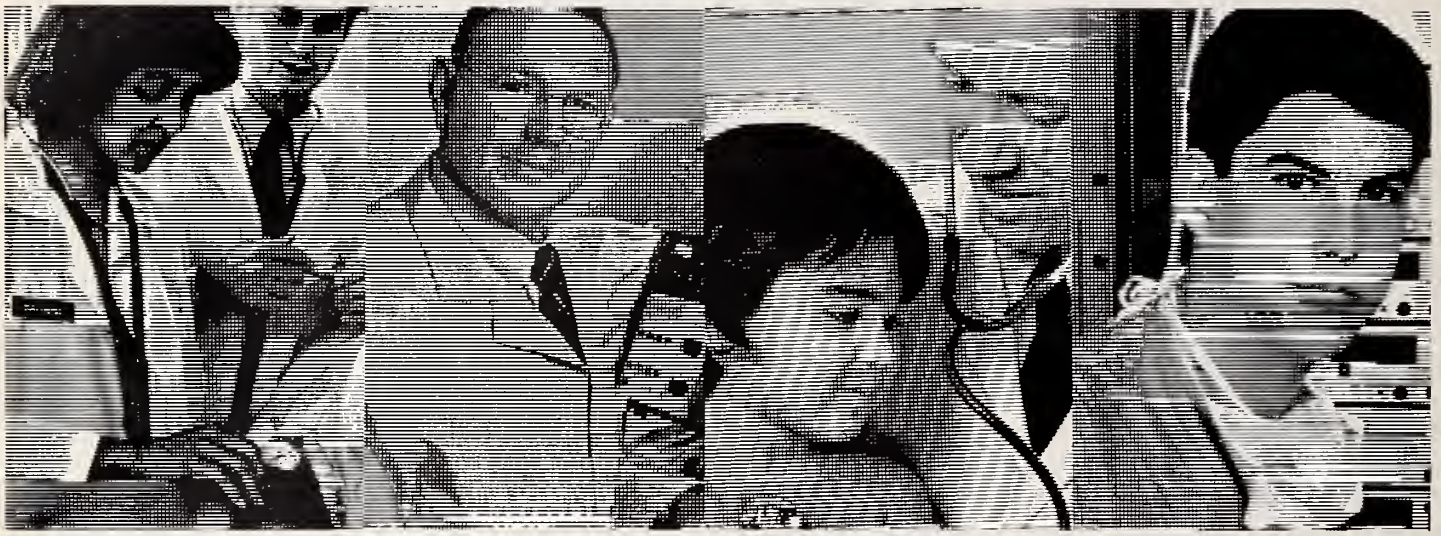
"Suicide rates fluctuated dramatically from year to year, no doubt due to the relatively small number of cases occurring in any county in any one year."

The author advocates regular and ongoing cooperation between all agencies and persons involved in monitoring, counseling, intervening in, and investigating teenage suicide victims. In doing so, information may develop so that the phenomenon of teenage suicide may be better understood in fact and theory, and lead to a reduction of teenage mortality.

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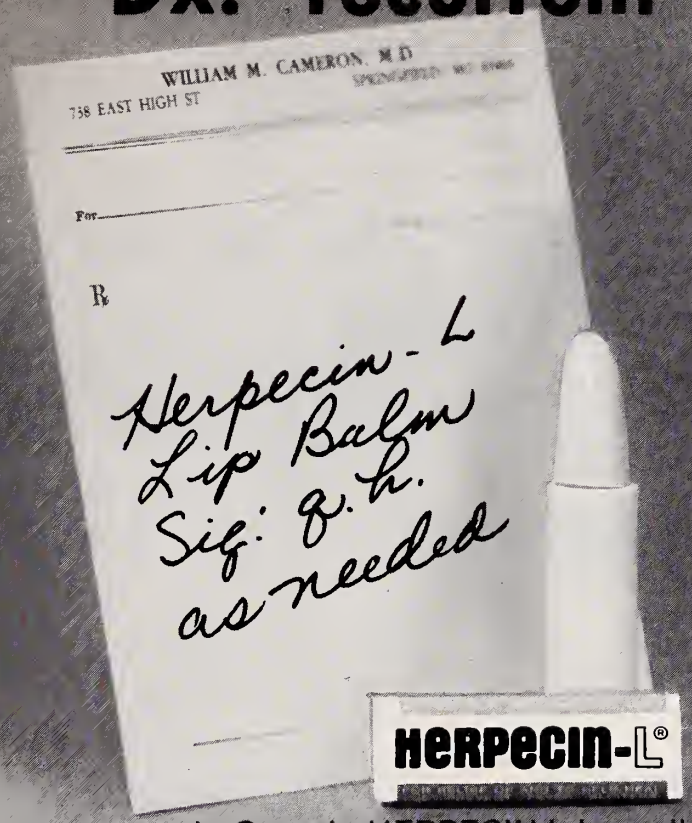
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ALBERT A. CARR, M.D.

Abstract

Internists provide primary medical care with emphasis on cognitive services. Parties other than patients are developing methods to curtail rising physicians' services costs. These parties are insurance carries, alternate delivery systems developers, entrepreneurs, coalitions, and government and corporate purchasers of health care. Some of the strategies proposed to curtail costs of physicians' services and methods for physician reimbursement are evaluated in this report. Resource based (cost based) relative value scale and/or negotiated fees seem to offer the best alternative to our present system for more equitable reimbursement for the primary care physicians.

As a result of rapidly rising health care costs in the United States, the federal government, state governments, corporate health care purchasers, and the public are actively seeking ways to curtail it.[1] The results have involved fee and utilization constraints for physicians. The patient (First Party) and physician (Second Party) no longer can decide in a free and independent manner the treatment of the patient nor the method and amount of reimbursement for the physician. Since 1950, the methodology of physicians' reimbursement has changed dramatically. Insurance companies (private and public) have become a way of life, and the extent to which they participate in apportioning the risk among members of a defined group of enrollees has become greater. Payments for physicians' services by Third Parties were 16.8% of the total in 1950 and increased to 62.7% by 1982. The costs and characteristics of medical practice have been further complicated by the increased litigation. This Fourth Party influence has increased the cost of medical care. Public policy is a Fifth Party which is now involved in the rationing by legislative process of medical and health care provided for the poor by taxation. Finally, we now have a Sixth Party of corporate practice of medicine, such as health maintenance organizations (HMOs) and for-profit hospital corporations. The impact of Third, Fourth, Fifth and Sixth Parties on reimbursements for physicians' services cannot be ignored. They have changed the whole practice of medicine with de-emphasis of the principles of Hippocrates (of top priority to the patient) and increased emphasis on cost,[2] leading to rationing of medical care.[3,4] Figure 1 depicts these influences on the practice of medicine.

The costs of medical and health care have been higher per patient for Medicare enrollees than for the general population. Table 1 shows the comparison of the overall national non-Medicare versus Medicare physicians' services.

The rate of increase for Medicare peaked in fiscal year 1983 (Figure 2). The yearly increases in Medicare physicians' services cost was dramatically curtailed in fiscal year 1984, with only 3 months of the physicians' fee freeze involved, July 1-September 30, 1984 (Table 2). Cost versus outcome (quality care) must now be considered (Table 3). The concern over Medicare costs and the rapidly growing Medicare population has resulted in legislation to change the way physicians are reimbursed. The physician fee freeze is probably the beginning of many dramatic changes.

It is important for internists to be aware of the changes under consideration in the method of physician reimbursement. With the increases in sub-specialists and procedural-oriented type practices, the general internist has not received equitable reimbursement for services. Internal

Dr. Carr is Professor of Medicine, Chief, Section of Hypertension, Medical College of Georgia, Augusta, GA 30912. Send reprint requests to him.

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"Some of the strategies proposed to curtail costs of physicians' services and methods for physician reimbursement are evaluated in this report."

Figure 1

Corporate Medicine		Insurance
6th Party		3rd Party
	1st Party Patient \| Physician (2nd Party)	
Public Policy		Litigation Malpractice Insurance
5th Party		4th Party

medicine is primarily cognitive. Cognitive services evolve from a history, physical examination, various laboratory and x-ray tests, review, reinterrogations, and re-evaluations. These are time consuming, demanding, arduous, and require learned skills, a large base of information, experience, and the ability to relate well to patients. They involve thinking, deductive reasoning, logic, knowledge of the natural history of diseases, and positive versus negative effects of treatments and diagnostic procedures. This involves continuous training. It involves literature review with inquiry skills, all of which are time consuming. The reimbursement for these cognitive services is much less than for technical, procedural, and surgical services. This stems from the

Table 1

Cost of Physicians' Services
In Constant 1983 Dollars
Percentage Change From Previous Year

FY	National	Medicare
1977	8.1	15.0
1978	5.5	10.6
1979	3.3	6.0
1980	6.0	12.2
1981	9.2	11.6
1982	5.9	14.8
1983	7.1	21.6
1984	5.7	5.1
1985*	5.8	5.5

*Estimate

Figure 2

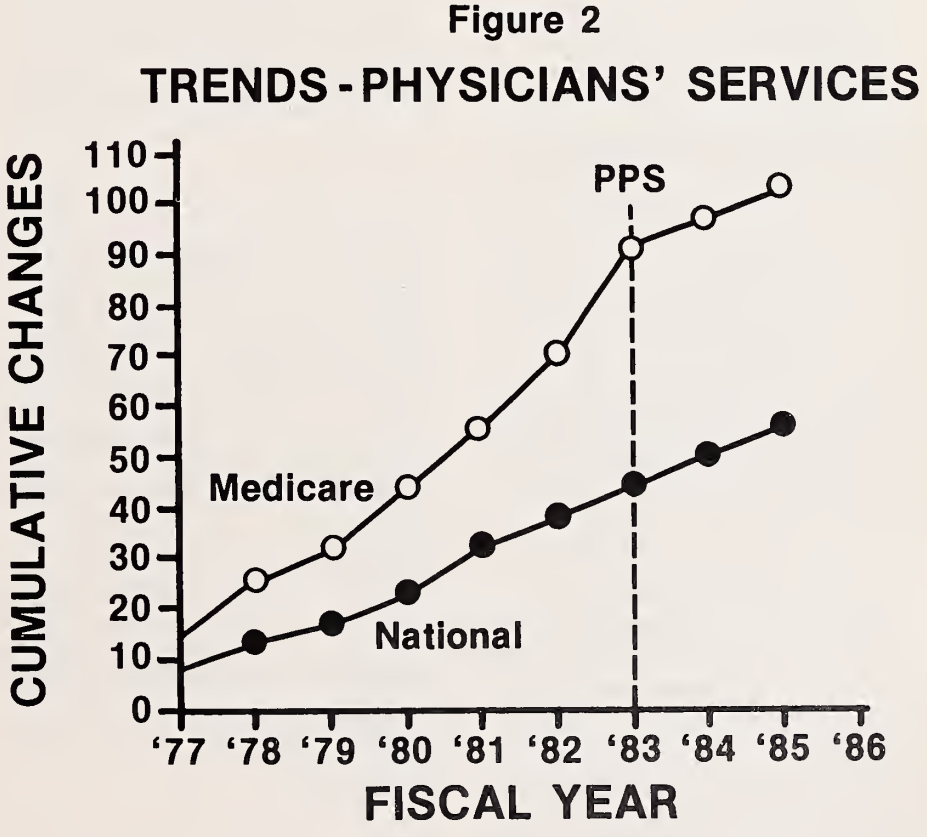


Table 2

PHYSICIANS' SERVICES
Trends

n	Years	National	Rate of Rise Medicare	Ratio Medicare/National
7	1977-83	5.5	11.00	2.1
2	1984-85	3.0	2.75	0.9

Table 3

MEDICARE

Cost - Resources versus Outcome (Quality)

Studies Needed

traditional predictability of procedure frequency versus the unpredictability of non-procedure medical care — a distinction clearly blurred recently. The subjective importance and time involved in cognitive services are more difficult to document as compared to objective procedures. The internist specializes in detection, diagnosis, treatment, and prevention of diseases affecting the internal organs and body systems. This includes knowledge and training in cardiology, dermatology, endocrinology, gastroenterology, hematology, nephrology, neurology, pulmonary medicine, and rheumatology as well as critical care, adolescent and geriatric medicine, infectious diseases, allergy, immunology, genetics, clinical pharmacology, nutrition, behavioral medicine, psychology, and oncology. Internal medicine practice involves older people with more complex illnesses and therefore is more time consuming in regard to cognitive requirements.

A telephone survey of 1,008 adults age 18 and older living in private households in the United States to ascertain physicians types used for routine medical care was conducted by Market Research Bureau, Inc. Nov. 11-14, 1983, for the American Society of Internal Medicine. It turned out that internists' patients tend to be older, better educated, and more affluent. Internists are those best able to diagnose and treat complex illnesses. The internist was considered a personal physician for 12% of those interviewed, although many did not understand the term internist. In another survey conducted between September, 1975, and February, 1976, a total of 7787 persons in 5432 randomly selected households across the United States were interviewed. Data were used in this report on 10,000 physicians in 24 specialties surveyed (response rate 62%) during years 1973-1976.[5] This showed that 78% of people interviewed could identify a personal physician. Primary care (principal care) was 61.9% of the general internists' practice, and their patients tended to be older with more severe and complex illnesses as compared to those of general practice or family physician. Those internists specializing in cardiology, gastroenterology, pulmonology, allergy, endocrinology, and rheumatology considered 46% of their practice was devoted to primary (principal) care.[5]

"It is important for internists to be aware of the changes under consideration in the method of physician reimbursement. With the increases in subspecialists and procedural-oriented type practices, the general internist has not received equitable reimbursement for services."

In 1984, physicians agreed to accept assignment of 59% of all Medicare claims. However, only 29.8% are participating physicians in the July 1, 1984, Public Law (P.L.) 98-369 15-month physician fee freeze. Medicare patients accounted for 26% of office visits and 30.6% of hospital rounds for all physicians.[6] For medical specialties (internists), 43.9% of all visits are Medicare related, as compared to 25.7% for surgical specialties.[7] Medicare beneficiaries paid for 29% of internists' income and 19% of all physicians' income in 1982.[8] Per capita expenditures are nearly three times greater for those 65 years and older as compared to younger patients.[8]

"Payments for physicians' services by Third parties were 16.8% in 1950 and increased to 62.7% by 1982."

The Health Care Financing Administration (HCFA) is considering ways to change reimbursement for physicians' services.[6] This will effect the way internists are reimbursed, because the older Medicare beneficiary population represents a substantial portion of the activities involved in the practice of internal medicine. Unless there is an increase in the reimbursement for cognitive services, internists will suffer continued decreasing net income. This is a culmination of attempts to contain medical-health care costs and specifically physicians' services.

Public Law 98-21, the Social Security Amendment of 1983, established the prospective payment system for hospital diagnostic related groups (DRGs). This law mandates that the Department of Health and Human Services (HHS) through HCFA collect data necessary to compute the amount of physician charges for services furnished to hospital inpatients for each DRG. The Secretary of HHS via the Office of Research, HCFA, was to report to Congress July 1, 1985, on the advisability and feasibility of paying for inpatient services on the basis of DRGs. This date and October 1, 1985, has passed, and the report still has not been delivered. A recent report by authors in the Office of Research, HCFA, may shed some light on the coming recommendation. They seem to support the relative value scale reimbursement sys-

tem toward resource (cost) rather than charge base.[9, 10]

P.L. 98-369 required the Office of Technology Assessment (OTA) to report to Congress by December 31, 1985, findings and recommendations with respect to which Part B payment amounts and policies may be modified to: 1) eliminate inequities in relative amounts paid to physicians by type of service, locality, and specialty with attention to any inequities between cognitive services and medical procedures; and 2) increase incentives for physicians to accept assignment. This report was presented in February, 1986, "Payment for Physician Services — Strategies for Medicare." Meanwhile, the physician fee freeze implemented in July 1, 1984, by P.L. 98-369 is still in place with the possibility that participating physicians will get a 4% increase in reimbursement for services. Some of the recommendations to Congress will be funding of research studies on the effects of cost containment programs which change the method of physician reimbursement for services on both the cost and outcome (quality). Some of the suggested changes in reimbursements are as follows:

1) Physician payments by DRGs
2) Usual, customary, and reasonable (UCR)
3) Charged-based relative value scale (RVS)
4) Resource cost relative value scale as described by Hsiao and Stason[10]
5) Capitation
6) Negotiated fee schedules
7) Indemnification

"The Health Care Financing Administration (HCFA) is considering ways to change reimbursement for physicians' services."

There are approximately 75,000 practicing internists in the USA today. Since 1975, the net income of internists has been falling. Table 4 shows this in 1983 constant dollars.[11]

Table 4

Internist Services- [12,13,14]

	Net Income		Office Expenses	
	In 1983 Dollars	% Change	In 1983 Dollars	% Change
1975	99,476	—	66,143	—
1981	94,451	5.1—	84,350	27.5+
1982	90,510	4.2—	79,041	6.3—
1983	85,600	5.4—	81,300	2.9+

For the internist over 9 years, net income in constant dollars has decreased 13.9%, while office expenses increased 22.9% (Table 5). In contrast, net income for surgeons increased 16.7%, to $138,900 in 1983.[1] Net income for anesthesiologists increased 51% during the same time period, to $150,000 per year. Office expenses for the anesthesiologists in 1982 were $54,536 as compared to $79,041 for the internists. The gross income of internists increased by 0.8% as compared to 28.1% for surgeons over this 9-year period.

These data point out that reimbursement for cognitive services of the internist is much less than that for procedure oriented services. There is need for change to improve the reimbursement rate for cognitive services. The changes in physicians services reimbursement suggested by HCFA to Congress may have a great impact on the internist. In FY 1984, of all 14.9 billion dollars toward physician service reimbursements, 20% was to internists or 2.98 billion dollars. This represents an average of $39,700 per internist or 24% of gross income.[6]

Cost containment has been the response to the rapid rise in Medicare expenditures associated with the fast growing older population with complex medical problems (Table 6). However, outcome (Table 3) has to be considered in terms of cost. Outcome can be measured by lives saved, decreased morbidity, and change in the history of disease, comparing one treatment to another (Figure 3). At points 1, 2, and 3 of the curve with increasing expenditure of costs, there are increasing outcome benefits. Increasing expenditures or costs at points 4 and 5 does not increase outcome benefits anymore. Insurance, litigation, public policy, and corporate medicine all influence the costs-outcome relationship. The influence of insurance companies, public policy, and corporate medicine to contain costs may decrease the outcome benefits. On the other hand, increasing expenditures does not always equate with a better outcome. Litigation costs never increase outcome benefits.

Physicians need to be knowledgeable as to the effects of intervention on outcome and costs. What public policy, insurance companies, or corporate medicine allow to spend may not be in the best interest of a patient. The patient-physician relationship has to remain the focal point of our medical care.

Table 5

INTERNISTS' Net Income 1983 Constant Dollars

1975	$99,476
—	
1981	$94,451
1982	$90,510
1983	$85,600

13.9% decrease over nine year period

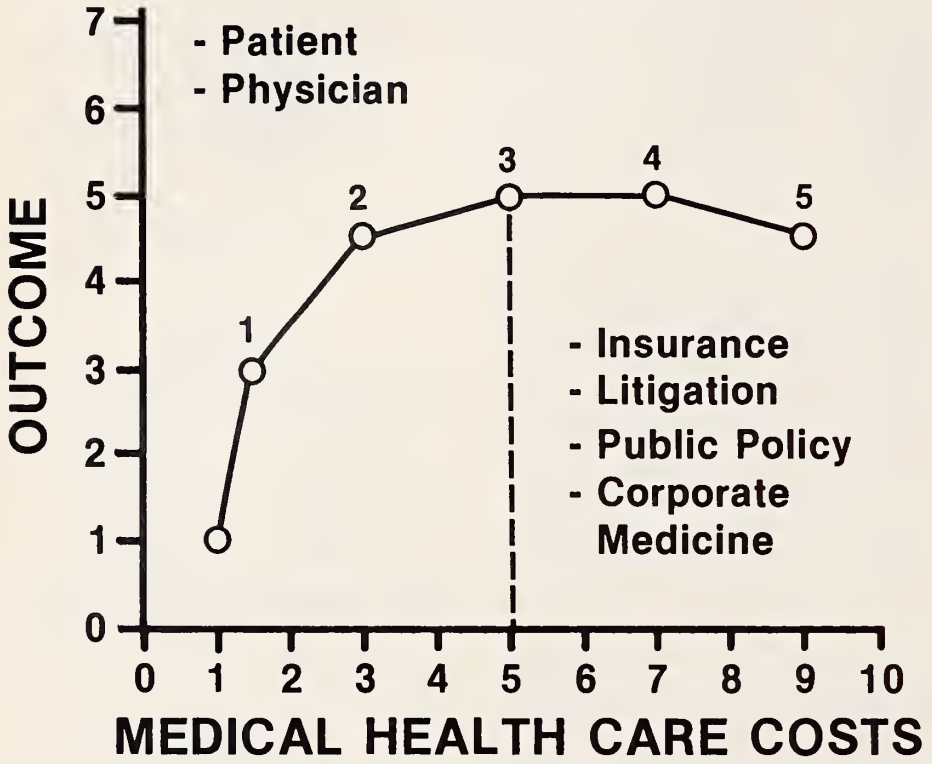
Table 6

MEDICARE

Cost Containment
Fastest Growing Population in USA
Medical Problems Complex

Figure 3

OUTCOME VERSUS COST (RESOURCES)



There already is some evidence by testimony to a United States Senate Special Committee on Aging, September 26, 1985, and evaluations on severity of illnesses[15] that DRGs may have a negative impact on outcome (Table 7). There can be changes in the patterns of practice which contain cost while not decreasing outcome.[16-19] Prevention of diseases by changes in lifestyle may influence outcome for the least amount of cost. The cost versus outcome question certainly does influence the patient-physician relationship (Table 8) with all the other influences of insurance, litigation, public policy, and corporate medicine (Table 9).

Some of the plans for physicians' services are described in the following reimbursement paragraphs:

1. *Diagnosis Related Groups*
 A global prospective, predetermined fee for a specific diagnosis. This would reduce incentives for more procedures and fragmentation of service. However, there are problems with regard to who gets paid the global fee: the attending physician, hospital, or independent practice association (IPA). If the attending physician gets the global fee, then in essence that physician is a gatekeeper of physicians' services reimbursements. This could lead to under treatment. Already it has been shown that DRGs, due to severity of illness mix, can result in decreased service. A prospective study has shown that payment by a DRG schedule cuts back severely on nonsurgeon reimbursements.[20] This is unacceptable for internists, since net income for this group is already falling (Tables 4 and 5).
2. *Usual, Customary, and Reasonable (UCR)*
 This is the way Third Parties now pay for physicians' services. However, it is inflationary and tends to increase costs since it is charged based.[12, 21] Services are reimbursed by the lowest of: 1) actual charges, 2) customary charge (median of that physician's charges the previous calendar year, or 3) the prevailing charge of physicians which is the charge of physicians of a particular specialty for a particular service in a specified geographic area. The prevailing rate is computed at 75% overall for Medicare and usually 80-90% for other insurers. This method is believed by some (non-primary care physicians) to be more competitive and reasonable. However, it has been shown to be neither reasonable nor competitive.[1, 21] This system is more of the same. It most likely will not be continued.

Table 7

MEDICARE

9/26/85
Special Committee on Aging
United States Senate

Testimony and Reports on Deterioration of Outcome due to DRGs

Table 8

HIPPOCRATES

Importance of Patient

Patient	1st Party
Physician	2nd Party

Table 9

GROUP

Importance of Society

Insurance	3rd Party
Litigation	4th Party
Public Policy	5th Party
Corporate Medicine	6th Party

3. *Charged-Based Relative Value Scale (RVS)*
A relative value scale is a listing of medical and surgical procedures by numbers which can then be converted into dollars. This is a charged based system which is easy to administer and is predictable. This is based on charges made by physicians in the California Medical Association figures published in the 1960s and early 1970s. These values can no longer be published due to rulings by Federal Trade Commission. This system discriminates against the internists. This method probably will not be used in the future.

4. *Resource Based Relative Value Scale*
Since the report of Hsiao and Stason,[10] there has been growing support for this method of payment.[9] This system of payment seems more equitable to the internist. The resource costs are: time, severity of illness, investment in original training, and overhead expenses. This system will allow adjustments to improve reimbursement for undervalued services which involve complex illnesses, require ambulatory treatment and evaluation, over a time high overhead, and physician skill (office visits and cognitive services). HCFA recently approved a grant to the AMA and Harvard School of Public Health (Hsiao and Stason) to evaluate a resource based RVS for medical services. This system will encourage more cognitive services and less expensive tests and procedures. This method may have high administration costs and may be difficult to document and implement.

5. *Capitation — HMO*
Physicians are paid a set amount per patient per year. Eliminates incentive to provide unnecessary services. May result in inadequate services. Administration of this method is fairly simple.

6. *Negotiated Fee Schedule — IPA*
Physicians or independent practice associations (IPAs) negotiate with Third Party payers the fees for medical and surgical services. This system has the advantages of 1) being less inflationary, 2) being predictable, 3) having lower administration costs, and 4) having the opportunity to improve reimbursement for undervalued cognitive services. Opposition to this approach is: 1) it will involve negotiations with physician groups, 2) may perpetuate disparities between cognitive and procedural/technical services, depending on the negotiators, and 3) may be inflationary depending on the skills and intent of IPAs. This method of reimbursement may be the future. It will require much input from the internist's point of view.

7. *Indemnification — No Assignment*
This system is much like what already is in place with Medicare when the physician does not accept assignment. The Third Party payer decides fee schedules based on claims experiences and needs to cut costs and other factors. This amount is paid to the patient (subscriber) for each covered service. The patient is responsible for paying the physician whatever is charged. This separates the insurance company from direct payment to the physician. This system is simple and clarifies to the patient what the insurance company pays for each service. It reduces administration cost and strengthens patient-physician ties and enhances the choices the patient has for physicians. It increases out of pocket expenses for the patient. This system perpetuates disparities between cognitive and procedural/technical services.

The best possible alternatives for physicians' service reimbursement to internists is either resource (cost) based relative value scale or negotiated IPA fees. The Georgia and American Society of Internal Medicine each is trying to influence considerations which will be to the advantage of internists. How all of these deliberations will influence the overall practice of medicine and patient care will in the future remain to be determined.

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Continuous Infusion Chemotherapy

Edgar D. Grady, M.D., Pat Grady, R.N.

"The development of improved central venous access methods and the availability of many portable infusion pumps have contributed to the expansion of chemotherapy treatment methods with decreased hospitalization in many cases."

INFUSION CHEMOTHERAPY is a helpful addition to existing methods of drug delivery. The traditional use of bolus delivery has given way to continuous infusion therapy in selected situations.

The development of improved central venous access methods and the availability of many portable infusion pumps have contributed to the expansion of chemotherapy treatment methods with decreased hospitalization in many cases. Ports are placed in the hospital, and infusion chemotherapy is begun. Often, the patient is discharged from the hospital a day or two after therapy is initiated. Patients are not separated from their families, and those who are working may continue to work. The cost of treatments is thus greatly reduced by decreasing hospitalization and allowing patients still to work. Patients may need hospitalization for other problems which may be done on an intermittent basis.

Advantages of continuous infusion chemotherapy include:

1. Prolonging the exposure produces new metabolites with additional sites of action.
2. Production and repair of breaks in D.N.A. are highly time dependent, which gives the infusion therapy a better kill, because of repeated breaks.
3. It allows compensation for rapid drug metabolism or excretion (as in the case of Ara-C, 5 FU).
4. It evens out the peaks and valleys of intermittent regimens.

From the Medical Research Foundation, Inc., 181-A Upper Riverdale Rd., Riverdale, GA 30274. Send reprint requests to Dr. Grady.

Chronic infusion with small strap-on pumps has been tried for long periods with Vinca Alkaloids, Adriamycin, Mitomycin-C, Ara-C, VP-16, Cis-platin, Methotrexate, 5-FU, FUDR, Bleomycin, DTIC, and Cytoxin. Drugs may be given concomitantly or on an alternating schedule.

Low dose infusion of Cis-platin, 5-FU or Adriamycin, administered with radiation therapy, may have better anti-tumor effects, and better tolerance.

Ara-C, which has a half plasma time from 5 to 15 minutes is useful for continuous infusion for improved care of leukemia and lymphoma. It is given in combination with Adriamycin, Bleomycin, Cytoxan, Vincristine, or Velban.

There may be a way of mixing drugs together with a single access, or there may be simultaneous infusion of multiple drugs, using multiple ports. A critical determination of the feasibility of mixing drugs is compatibility and stability over time. Compatibility and stability have been established for 5-FU and Methotrexate, as well as Adriamycin and Cis-platin and Adriamycin and Velban. Sequential administration may be needed when simultaneous or mixing is not practical. Adriamycin at 3 mgs per

meter square per day and Velban at 0.5 per meter square per day may give stomatitis and leukopenia after 21 days, but are usually well tolerated together up to that time.

Toxicity is decreased while maintaining therapeutic effect by continuous therapy in the following situations: Cardiotoxicity from Adriamycin; Cerebellar toxicity from 5-FU; Renal toxicity from Cis-platin; Lung toxicity from Bleomycin; Nerve toxicity from Vincristine.

Another parameter, using tissue culture of stem cells for sensitivity, may be added. Where 1 gram of fresh cancer tissue can be made available, the assay can be ready in about 10 to 14 days. Application of these tests results may be included in the management of the patient's disease. There are several specialized laboratories available for stem cell culture and drug and heat sensitivity.

The programs are carried out via the ports placed for intermittent schedules, according to the patient's tolerance and in conjunction with other suitable therapies; e.g., hyperthermia, external radiation therapy, internal radiation therapy, surgical debulking or excision.

Home service teams are available to share in the management of the patients. They will cooperate in scheduled visits to the home (to care for dressings, access port flushing, hematology, drug delivery — usually 1-2 times per week). Complications are minimized with good home support. ■

"A critical determination of the feasibility of mixing drugs is compatibility and stability over time."

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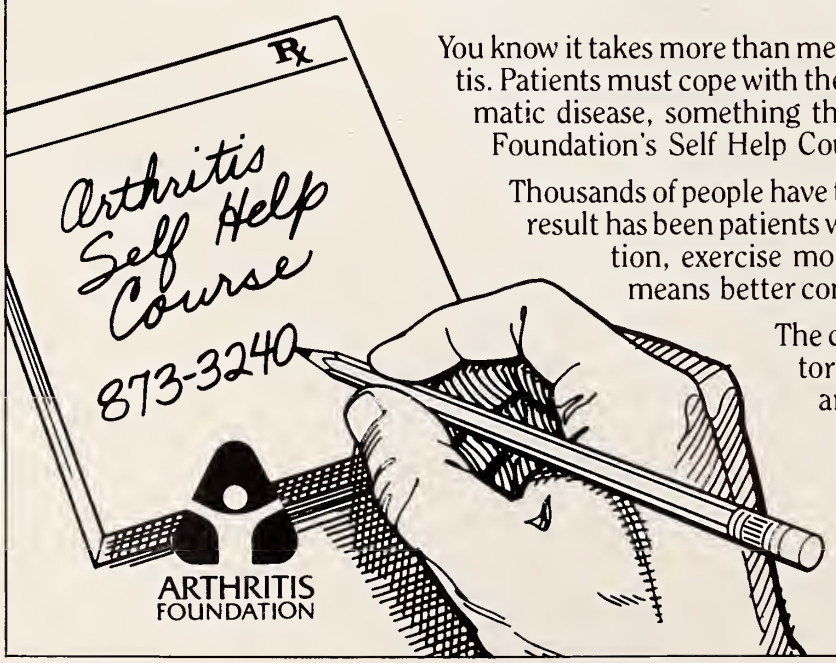
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Respiratory Depression: At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.
Head Injury and Increased Intracranial Pressure: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.
Acute Abdominal Conditions: The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.
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Cough Reflex: Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.
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Usage in Pregnancy: Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Nonteratogenic Effects: Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.
Labor and Delivery: Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.
Nursing Mothers: It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.
Pediatric Use: Safety and effectiveness in children have not been established
ADVERSE REACTIONS
Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.
Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.
Genitourinary System: Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.
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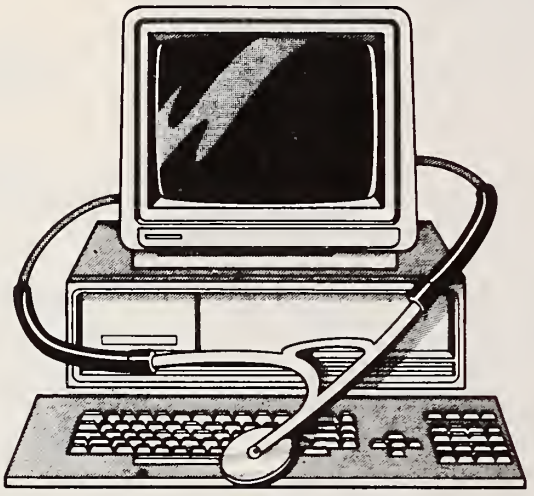
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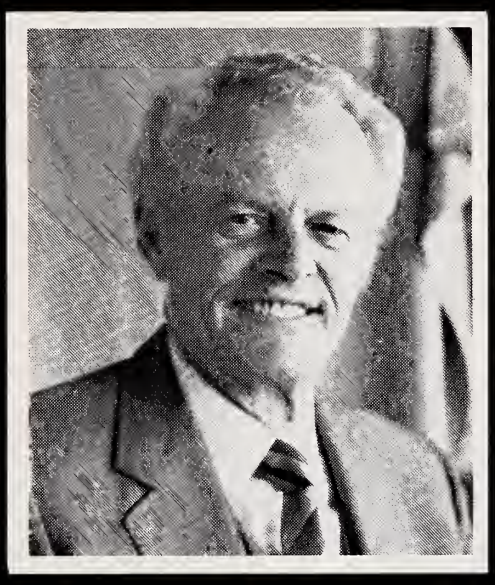
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Fetal Echocardiography: Background and Clinical Indications

F. W. Arensman, M.D., G. B. Holzman, M.D., S. Martin, D. Geist, R. Castillo, M.D.

"Improvements in equipment and sonologists' and sonographers' expertise have resulted in improved imaging and diagnostic accuracy."

Introduction

Diagnostic ultrasound is a mainstay in the assessment of fetal well-being and detection of fetal abnormalities. Improvements in equipment and sonologists' and sonographers' expertise have resulted in improved imaging and diagnostic accuracy. Fetal echocardiography is approximately 10 years old, but detailed, specific in-utero diagnoses have been made only recently. These prenatal studies aid in establishing the prognosis and in the management of infants with congenital heart disease. As such, they are helpful to the expectant mother and her physician.

The goals of this paper are to introduce:

1. **the current capabilities and limitations of fetal echocardiography**
2. **a list of indications for patient referral for echocardiography.**

Background

In 1954, Edler and Hertz described ultrasonic detection of cardiac motion.[1] Doppler assessment of fetal heart rate was used extensively in the 1960s, and this technique continues as a major method of fetal heart rate monitoring. Identification of the fetal heart structures by pulsed ultrasound was first described in 1968,[2] and demonstration of anatomic abnormalities soon followed. Doppler echocardiography was first used to quantitate fetal cardiac output in 1984.[2]

Many of the advances in fetal echocardiography are attributable to improved image quality. Technical advances have been paralleled by increasing imaging expertise. The critical ultrasonographer employs the improvements in equipment in an attempt to address questions which were unanswerable 2 or 3 years ago. As of this writing, the innovative nature of fetal echocardiography implies that the accuracy of diagnoses is unknown.

In an attempt to address the question of accuracy, Huhta et al[4] examined 31 patients at high risk for congenital heart disease and compared echo diagnoses to postnatal catheter and autopsy diagnoses. They demonstrated that 11 of these fetuses (36%) had congenital cardiac defects. There were no false positives and two false negatives. Both infants who were false negatives had small ventricular septal defects. The authors concluded that:

1. Echo is a sensitive means of detecting cardiac disease in high risk infants with the exception of those children who have isolated ventricular septal defects.

2. There is a high mortality rate in fetuses in whom congenital heart disease is diagnosed in utero.

A larger English study involved prospective examination of 1600 pregnancies.[5] Thirty-four patients were thought to have structural cardiac abnormalities. Each diagnosis was subsequently confirmed by anatomic or pathologic diagnosis. Eight patients were incorrectly diagnosed. There were four false-positive predictions and five false-negative predictions. (A single patient with a ventricular septal defect was predicted to have aortic stenosis). In no case did an erroneous diagnosis influence the outcome of the pregnancy. In six cases, pregnancy was terminated because of the recognition of a major cardiac abnormality.

An earlier study by Allan et al[6] reported results from 21 pregnancies terminated for various non-cardiac reasons. Inutero diagnoses in 18 cases correctly identified the heart as normal. Two hearts were correctly identified as having abnormalities, and one normal heart was thought to have a ventricular septal defect.

Fetal echocardiograms have been performed at the Medical College of Georgia since 1984. Interpretation has been a combined effort of members of the Department of Obstetrics and the section of Pediatric Cardiology. To date, nearly 100 studies have been performed. A variety of structural and rhythm abnormalities have been correctly identified including atrioventricular canal defects, situs inversus, L-transposition of the great arteries, shared cardiac structures in conjoined twins, anomalies of systemic venous return, premature atrial and ventricular contractions, second degree and complete heart block. This ongoing experience has encouraged us to attempt to identify increasingly more subtle defects.

Technique

Studies are routinely performed between the 18th and 32nd week of gestation. Successful studies can be obtained in about 95% of these patients.[7] Prior to 16-18 weeks, cardiac structures are frequently too small for accurate evaluation. Beyond 32 weeks, imaging may become more difficult because of the relative immobility of the fetus and the relative reduction in amniotic fluid. Other factors associated with poor imaging at any stage in pregnancy include morbid maternal obesity or a fetus who remains in either an occiput or sacrum anterior position. The presence of any of these confounding problems should not discourage attempts at imaging if a cardiac problem is strongly suspected.

Table 1 — Indications for Fetal Echocardiography

Fetal Arrhythmia
Non-immune Hydrops
History of Congenital Heart Disease
Maternal Exposure to Teratogen
Maternal Diabetes
Maternal Collagen Vascular Disease
Chromosomal Abnormalities
Associated Congenital Malformations

Indications

Indications for fetal echocardiography are listed in Table 1.

Fetal Arrhythmia

The most common indication for referral to our institution has been for evaluation of *fetal arrhythmia*. It has been recommended that any arrhythmia detected by fetoscope or Doppler be evaluated by two dimensional echocardiography. We would recommend echocardiographic examination when the fetal heart rate is greater than two standard deviations above or below the mean (<120, >160), when persistent arrhythmias are noted, or when the arrhythmia is greater than 10% of the total beats examined.[8]

From the Departments of Pediatrics and Obstetrics and Gynecology, MCG, Augusta. Send reprint requests to Dr. Arensman, MCG, Assistant Professor of Pediatrics, Section of Pediatric Cardiology, BAA 806, Augusta, GA 30912.

"Studies are routinely performed between the 18th and 32nd week of gestation. Successful studies can be obtained in about 95% of these patients."

Non-immune Hydrops

A second indication for fetal echocardiographic examination is the presence of non-immune hydrops.[9] This is usually detected on a level I ultrasound examination. Hydrops is associated with an increased incidence of both cardiac structural and functional abnormalities and arrhythmias including complete heart block and supraventricular tachycardia. Structural abnormalities have included premature closure of the ductus arteriosus, intracardiac tumor, tetralogy of Fallot, pulmonary insufficiency, large ventricular septal defect, and poor ventricular function.[9] Echocardiographic examination is often helpful in elucidating the etiology of hydrops.

Family History of Congenital Heart Disease

Fetal echocardiograms are recommended when there is congenital heart disease in a first degree relative. Increasing numbers of young men and women with repaired congenital heart disease are now marrying, having children, and may be at increased risk for having infants with congenital heart abnormalities. In addition, echocardiographic evaluation is available to parents who have had previous children with congenital cardiac abnormalities. Happily, the yield has been low in these studies, and parents seem pleased that we see no signs of congenital heart disease in their unborn child. It is our *opinion* that a normal echo relieves the overwhelming concern which follows the birth of an affected child.

Exposure to Teratogen

A small number of fetuses have been examined when there is a strong maternal history of exposure to a known teratogen. Although most congenital heart disease is inherited in a multifactorial fashion, there are some teratogens which have been strongly associated with specific cardiac defects. These include Rubella virus, folic acid antagonists, and retinoic acid.[10] Other suspected teratogens include amphetamines, some anticonvulsants (including primidone),[11] lithium,[12] alcohol, some steroids, Cytomegalovirus, Herpes, and Coxsackie B. An exposure to any known or suspected cardiac teratogen early in pregnancy warrants a comprehensive ultrasound examination to include an echocardiographic examination.

Maternal Diabetes

Maternal diabetes is associated with an increased risk of fetal abnormalities including vertebral, gastrointestinal, renal, and cardiac defects. Mothers should therefore be informed of these potential problems. An initial comprehensive ultrasound evaluation, including examination of the fetal heart, should be part of the diabetic's routine prenatal care.

Maternal Collagen Vascular Disease

The high incidence of conduction abnormalities in infants of mothers with Systemic Lupus Erythematosus warrants echocardiographic assessment in these fetuses. Conversely, a mother who has an infant in whom complete

heart block is detected should be evaluated to rule out S.L.E. Heart block has also been associated with other maternal collagen vascular diseases.

Chromosomal Abnormalities

Almost 50% of children born with Down syndrome have cardiac defects. Most commonly these are ventricular septal defects or atrioventricular septal defects (A-V canals). When the diagnosis of trisomy 21 is made, echocardiography in utero is warranted to aid in the ability to predict anatomic abnormalities which can include but are not limited to the lesions mentioned. Several other chromosomal abnormalities such as trisomy 13 and 18 have a high incidence of congenital heart disease as well.

Other Congenital Malformations

When one or two abnormalities are detected in a fetus, there is a greater likelihood that additional congenital malformations, including congenital heart defects, are present.[13] Certainly the presence of vertebral, anal, tracheoesophageal renal, and limb abnormalities are associated with an increased incidence of congenital heart defects. Other commonly associated defects include abnormalities of the abdominal wall (omphalocele), and abnormalities of visceral situs.

Conclusion

This is an exciting time in the field of ultrasound in general and fetal echocardiography in particular. Recent technologic advances have made it possible to detect heretofore undiagnosable cardiac conditions in-utero. Knowledge of these abnormalities prior to delivery is helpful to both the mother and her physician in providing optimal care and to participate potentially life-threatening clinical situations.

The list of indications provided in this article are not, at this time, absolute. We anticipate that these indications may change over time.

"Knowledge of these abnormalities prior to delivery is helpful to both the mother and her physician in providing optimal care and to anticipate potentially life-threatening clinical situations."

The authors wish to acknowledge secretarial assistance of Pam Hawkins and editorial comments of Drs. David Flannery and Wesley Covitz.

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NEW MEMBERS

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1365 Clifton Rd., Atlanta 30322

Baron, Murray G., M.A.A. — Act
1365 Clifton Rd., Atlanta 30322

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1365 Clifton Rd., Atlanta 30322

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PERSONALS

Third District

Jane Rivers, M.D., was feted by co-workers and friends at West Central Georgia Regional Hospital. Dr. Rivers, the first physician to arrive at the hospital 12 years ago, retired from state service on May 1. She worked at the Columbus Health Department from 1951 until joining the hospital in August 1974. In addition to her job as director of the children and adolescents unit, Dr. Rivers has been physician in charge of the hospital's quality assurance and utilization review program, president of the medical staff, and medical director.

Fifth District

Friends and colleagues of **Robert Bruce Logue, M.D.,** have established a Chair of Cardiology in his honor at Emory University Medical School, where he had been head of the Internal Medical School. Dr. Logue has had a long and distinguished history at Emory University. He graduated from Emory College in 1934, and from the Emory School of Medicine in 1937. He joined the faculty of the medical school in 1945 and became head of the Internal Medicine Division of Emory University Clinic at its founding in 1953. Dr. Logue served as chief of medical services at Emory University Hospital from 1957-1980, when he was appointed director of the Carlyle Fraser Heart Center at Crawford W. Long Memorial Hospital, a position he still holds.

Fifth District

Roger Sherman, M.D., received the Outstanding Clinical Professor Award from the Emory University School of Medicine Class of 1986. Dr. Sherman is Professor of Surgery at Emory and Chief of Surgery at Grady Memorial Hospital.

Sixth District

John Crawford, M.D., received the Outstanding Citizen Award at the community recognition banquet in Barnesville County recently. The banquet was sponsored by the Chamber of Commerce at Gordon.

Tenth District

Internist **Ram K. Reddy, M.D.,** who has been practicing medicine in Franklin Springs for the last two years, announced the relocation of his office practice to a larger facility, located on Highway 29, in Royston.

ERRATUM

In the article, "Home Health Care: On The Increase" by Merle P. Hazard, R.N., on page 275 of the May, 1986, issue of the *Journal,* the footnote referred to by the asterisk in the first paragraph was omitted and should have been: *From an unpublished report by Allan Goldman for the Georgia State Health Policy Council: "Home Health Agencies in Georgia: An Updated Review and Analysis," September, 1984.*

In the fifth paragraph of that article, the percent of proprietary agencies between 1974 and 1984 was incorrectly listed as having risen 100%. The *correct* percent is *1100%.*

The *Journal* regrets that these errors occurred.

RESOLUTION

WHEREAS, the recent death of Charles R. Andrews, Jr., M.D., of Canton, Georgia, is a grievous loss which saddens physicians and other health care personnel of the Ninth District, many located throughout our state, and in other areas, and

WHEREAS, Dr. Andrews, through his conscientious care of the sick and his dedicated service in many professional organizations, made outstanding contributions to the practice of medicine and surgery during his lifetime, and

WHEREAS, his numerous achievements in the interest of organized medicine included his election as President of the Ninth District Medical Society, Councilor to the Medical Association of Georgia representing the Ninth District, President of the Medical Association of Georgia, and service to organized medicine in many other positions, as well as having been National Surgeon General for Veterans of Foreign Wars, and Surgeon for the State of Georgia V.F.W. organization for many years, and

WHEREAS, in addition to his outstanding ability as physician and general surgeon, and his excellence as a spokesman for organized medicine, Charlie was a respected leader in his community, a faithful member of his church, and a beloved and loving husband and father; now, therefore, be it

RESOLVED, that the officers and members of the Ninth District Medical Society, meeting on April 2, 1986, express their heartfelt sympathy to the family of Dr. Charles R. Andrews, Jr., for their loss, and express as well the most sincere admiration and gratitude for the life and service of Charles R. Andrews, Jr., M.D., — friend, colleague, and leader to us all.

BE IT FURTHER RESOLVED, that a copy of this resolution be recorded in the permanent minutes of the Ninth District Medical Society, a copy sent to Dr. Andrews' family, and a copy sent to the *Journal of the Medical Association of Georgia*.

Joe L. Griffeth, M.D.
President, Ninth District Medical Society
Clinton E. Branch, Jr., M.D.
Secretary, Ninth District Medical Society
Rupert H. Bramblett, M.D.
Director to the Medical Association of Georgia

DEATHS

Thomas A. McGoldrick, Jr., M.D.

Thomas A. McGoldrick, Jr., died at his home after a long illness. A Brooklyn native, Dr. McGoldrick lived in Savannah and practiced internal medicine, specializing in cardiology, for 38 years. He graduated from Manhattan College and Harvard Medical School. He served as lieutenant commander in the U.S. Navy during World War II. He was a former chief of staff of St. Joseph's Hospital and former president of the Georgia Medical Society. Surviving are his wife, seven children, and three grandchildren.

James Anderson Woodall, M.D.

James Anderson Woodall, of Thomaston, died on April 20 following an extended illness. A native of Upson County, Dr. Woodall graduated from Emory University Medical School in 1937, serving his internship at Georgia Baptist Hospital in Atlanta. He returned to Thomaston in 1939, where he and his brother, the late Dr. Frank Woodall, established a joint practice. Their younger brother, Pruitt, joined them following World War II, and the three practiced medicine together for almost 25 years. When Upson County Hospital was built in 1951, Dr. Woodall joined the first medical staff of the facility. He retired in January 1974.

QUOTES

This summer one-third of the nation will be ill-housed, ill-nourished and ill-clad. Only they call it vacation.
JOSEPH SALAK

A break in the established order is never the work of chance. It is the outcome of a man's resolve to turn life to account.
ANDRÉ MALRAUX

The anticipation of vacation often provides more pleasure than the vacation itself.
FRANK TYGER

Praise does wonders for our sense of hearing.
ARNOLD GLASOW

Opportunity wears many disguises, including trouble.
FRANK TYGER

The most destructive criticism is indifference.
E. W. HOWE

The best things in life are not free but priceless.
BENJAMIN LICHTENBERG

The secret of contentment is knowing how to enjoy what you have, and be able to lose all desire for things beyond your reach.
LIN YUTANG

Let us not paralyze our capacity for good by brooding of man's capacity for evil.
DAVID SARNOFF

It's leisure hours, happily used, that have often opened a new world to many a person.
GEORGE M. ADAMS

The sun does not shine for a few trees and flowers, but for the wide world's joy.
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"The Auxiliary's role and the need for* visible *participation has expanded. . . . All of these endeavors require involvement, dedication, and commitment, but the rewards are ten times greater than the personal investment."

". . . BEING a doctor's wife is both an art and a career. . . . No single influence helps to develop and mold the doctor, as does his nearest partner in the business and adventures of life. The development of character, of personality, of standards, of ideals, of humaness depend upon her influence, as upon no other. And his success and influence in his community depend upon these qualities, as much as upon his scientific attainments." These words were spoken by Dr. Rock Sleyster, President of the American Medical Association, when he addressed the Woman's Auxiliary in St. Louis, Missouri, in 1939.

Dr. Sleyster further stated, "We are living in a muddled world — a world which is looking for leadership. The future of Medicine and the future of the world depend upon the leadership which it develops. Leadership can influence only as a result of confidence. It is to you, the wives of doctors, I want to appeal, to develop in your men those qualities which will inspire the confidence necessary, they may hold the thoughts of their community in matters relating to health."

This was a challenge of the late thirties but it rings with the voice of the eighties. We are still living in a muddled world, the future of Medicine and the future of the world depends more than ever upon the leadership which it develops. Auxiliaries and medical societies must join forces and work as a team to provide this leadership.

The Medical Association of Georgia refers to the Auxiliary as its "Greatest Asset." They speak of us as the best Public Relations Department they could have. And this is good! Auxilians all over Georgia and the nation are making a difference in their communities by lending their time, talents, and expertise to health-related projects.

The Auxiliary's role and the need for *visible* participation in the community, has expanded to such an extent that I am labeling this year, the year of "Auxiliary Extraordinaire." In the drama of health education, the auxiliaries must continue to go to the youth of our communities; tell them of the rewards of good health habits and preventive health care; we must warn them of the hazards of the use and abuse of alcohol, drugs, tobacco — the smoking and smokeless variety alike. We must reiterate to them that they have a choice in what happens in their lives and then we must help them to develop character skills and ideals with which to make the right choices.

The older American population is the fastest growing segment of our society. Bancroft wrote, "God loves the Aged; He gives them greater visions than the Young; He puts wisdom on their tongue." We must respect those visions and listen to their wisdom. We must see that their corner of the world is safe and accessible to them and that their needs are filled. We cannot let them lose their zest for life.

The promotion of programs of self monitoring by which individuals can

examine themselves for signs of impending health problems should be continued. Working with coalitions of other health-related organizations might be a means to this end. We have to continue to provide avenues by which the less privileged can obtain needed health care. We must strive to make the helping hands of the doctor's wives reflect and enrich the doctors' dedicated service to mankind.

The necessity for Auxilians to become involved in legislation and the legislative process is the challenge of the hour. The spector of *malpractice lawsuits* and the need for tort reforms looms ever present and casts a long shadow. The day of "If we can't be involved, we can at least be informed" is over. Every Auxilian must become informed *and* involved. One Key Contact Person per Auxiliary is not enough — we must all become "Key Contact People." We have to work hard at the grass roots levels of the political scene; the need to stress voter registration, especially in the medical families, is vital; then we must exercise our right to vote. "We cannot stand up for rights and then sit down on your duties." Now is the time to get the attention of the lawmakers and would be lawmakers of our state while they are at home with their ears tuned to the voices of their constituents.

In addition to our public and civic endeavors, the Auxiliary must provide for its own. The need is great for the formation of support groups, or circles of love, if you will, for those of us who are caught in the throes of malpractice suits. A physician and his family, involved in this devastating event, need to know that we understand, that we care, and that they are not alone — we are an outlet through which they can express their feelings. They must be made to feel the strong bonds of peer support. This same strong peer support is needed for our impaired physicians and their families, as well. We must help to remove the stigma of this debilitating disease and provide caring, concerned support groups for the families, as the physicians seek the help which they need.

All of these endeavors require involvement, dedication, and commitment, but the rewards they reap are ten times greater than the personal investment. Remember, the development of strong leadership in the medical community depends upon the auxiliaries and the medical societies as upon no other. Being a physician's wife is both an art and a career! I want to close with this poem:

"There is nothing I can give you which you have not; But there is much, that while I cannot give you, you can take —
No Heaven can come to us unless our hearts find rest in today, — Take Heaven.
No peace lies in the future which is not hidden in the present moment — Take Peace.
The gloom of the world is but a shadow; Behind it, yet within reach, is Joy — Take Joy."

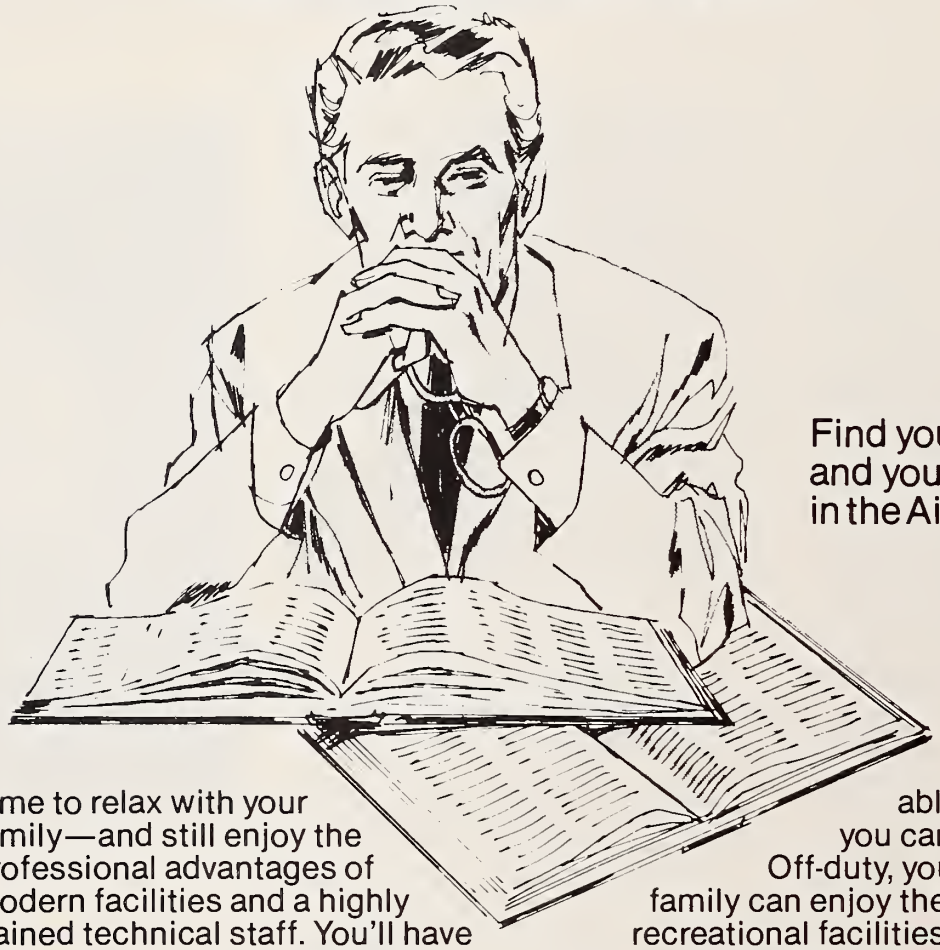


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President, A-MAG

*This was Mrs. Tippins Inaugural Address at the Annual Meeting in April, 1986.

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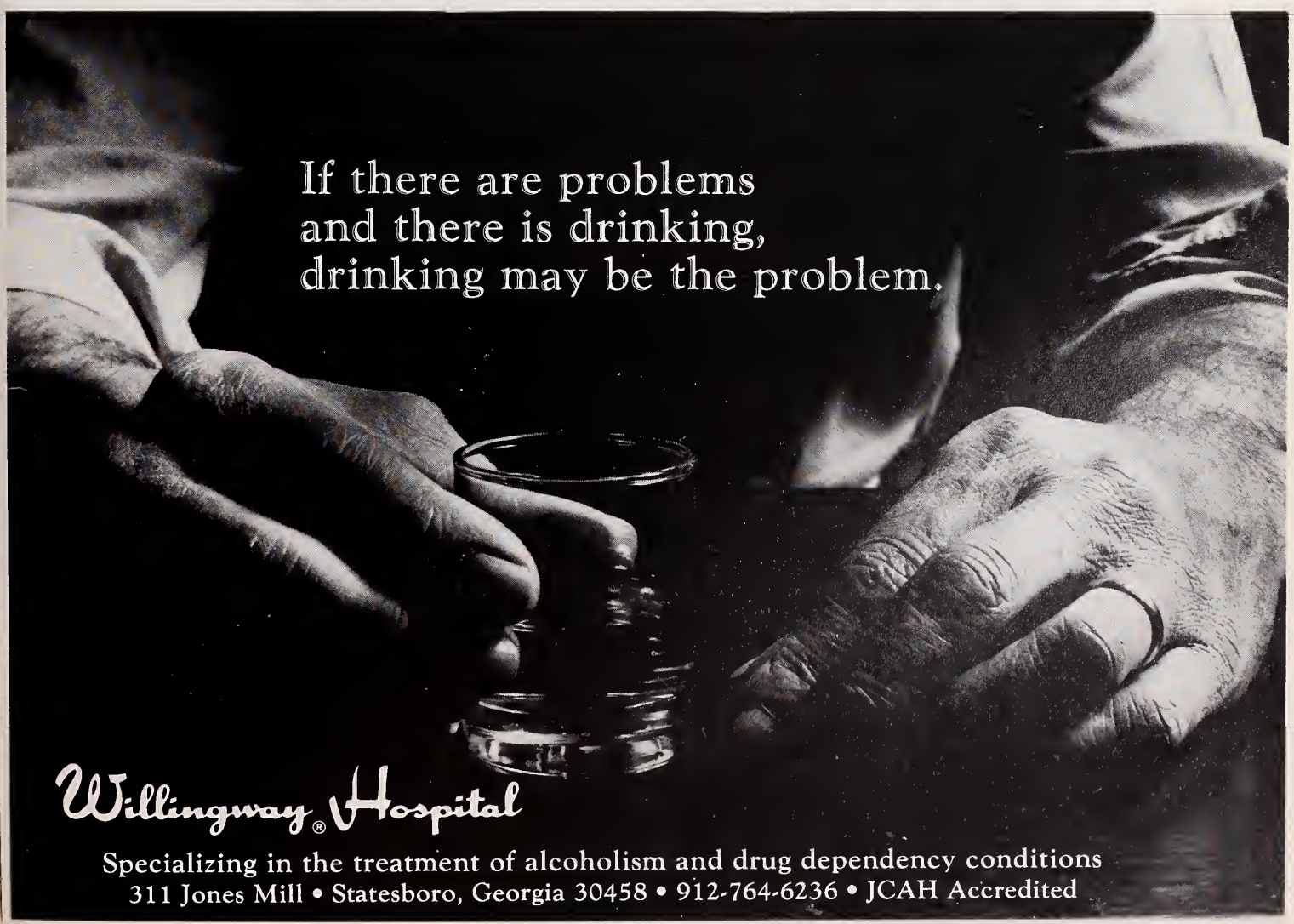
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STYLE — Ordinarily articles should not exceed 3,000 words. Only under exceptional circumstances will articles of over 4,000 words be published. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

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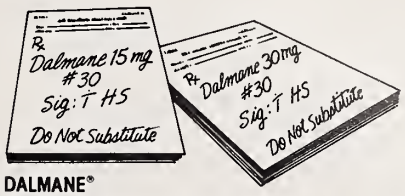
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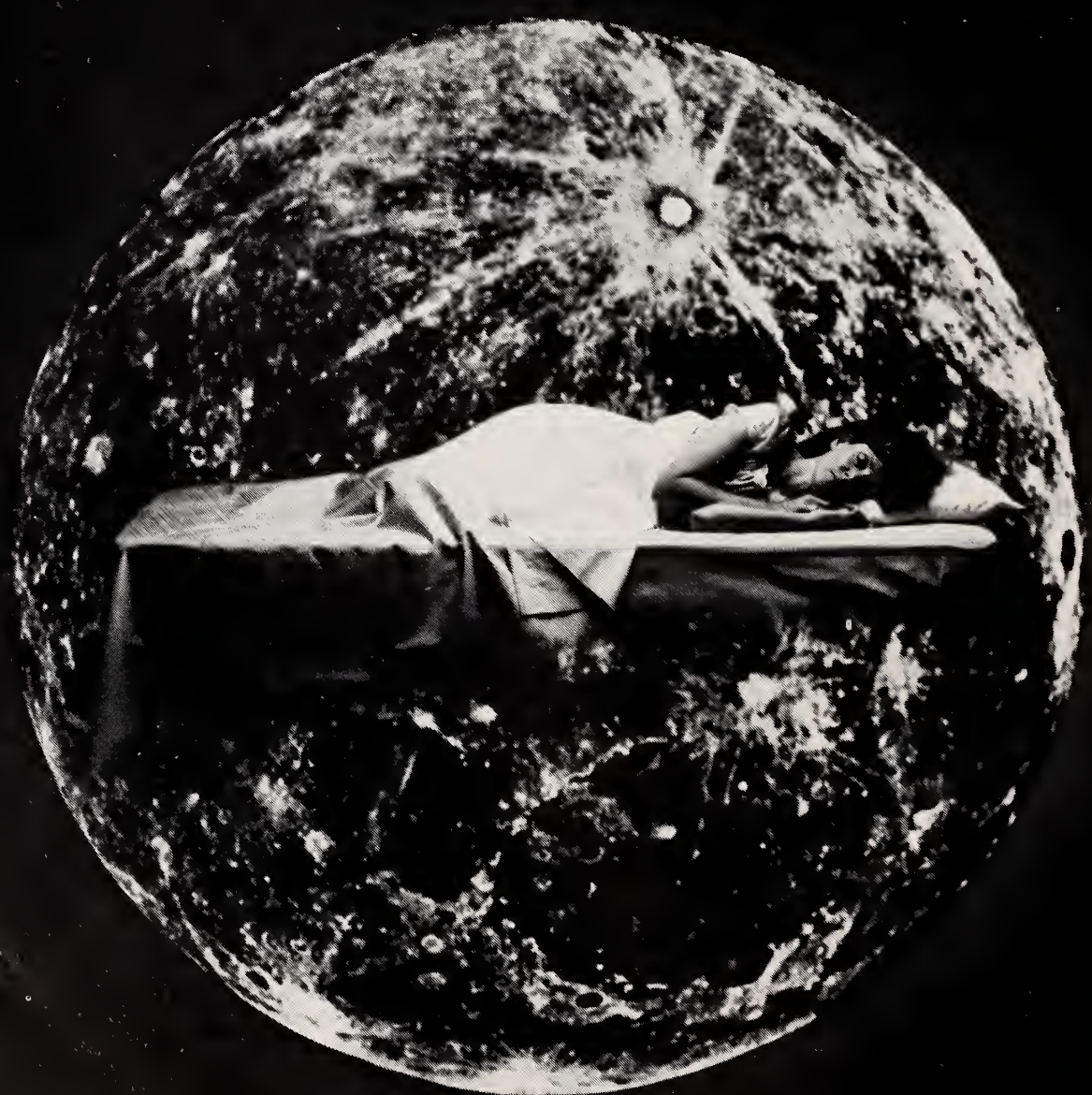
References: 1. Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriotr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Telecanference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.

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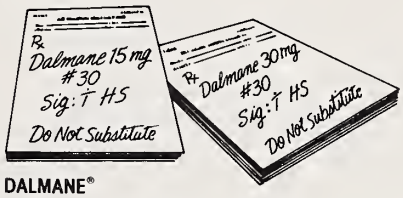
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COVER

This issue of the *Journal* focuses on the disease of chemical dependence. Dr. Morrison's editorial introduces the featured topic, followed by Drs. Martin and Talbott's article on the special issues faced by women physicians in recovery. In other articles, Dr. Talbott defines the disease of alcoholism and other drug addictions, and Dr. McKemie, et al. study an alcohol and drug population.
Cover artwork by Elizabeth Traynor, of Atlanta.

Smoking in Hospitals?

Dear Editor:

"NO!" is the answer to the question, "Do you want smoking in your hospital?," posed on the cover of the May, 1986, *Journal*. But, I don't believe that smoking is necessary in the doctor's office, restaurants, supermarkets, or other indoor places either. I hope that the doctors of MAG will back the editorial stand presented by Dr. Bill Kenny and the suggestions of Dr. Sheldon Cohen.

Unfortunately, there is one YES concerning a point that Dr. Kenny was making. Yes, those hospitals, doctors, and nurses who are "passive on the smoking issue may be perceived as hypocritical. . . ." Since 1964, physicians in the post of Surgeon General have told America of the devastation which is tobacco's legacy. Yet, it is as if doctors have disregarded those reports for too many years.

As to Dr. Kenny's Chinese history lesson — beheading is a quick, "painless" way of death compared to the agony of lung cancer, or the continuous "drowning" of emphysema. The smokers inflict upon themselves much harsher punishment for smoking than any court would sentence them to endure. Today, China is Marlboro country, producing twice the tobacco of the U.S., which ranks second.

Dr. Cohen's article, "Institutional Tobacco Withdrawal Symptoms," made some very good points and raised several questions for hospital personnel to ponder. The point about denial is very important to remember, for doesn't it appear that people either don't believe the health risks of tobacco, or don't want to believe them? By not restricting smoking, governments, businesses, and hospitals have contributed to the deaths resulting from use of tobacco. Dr. Cohen hinted at some of the legal problems inherent with allowing the use of tobacco in hospitals. From a legal point of view, are persons who allow others to commit crimes or suicide liable for punishment under the law? If John Belushi's friend can be tried for murder, because she helped him get high, will nurses who light patient's cigarettes be jailed for contributing to killing that person via lung cancer or a cigarette-caused fire?

The health care industry is wracked with torts. I have little sympathy for a doctor who is being sued for a condition that was the result of his decision to allow the patient to smoke. When hospitals and doctors put a rule into effect that NO patient will smoke 48 hours before surgery, and NO woman in labor will smoke — then maybe less lawsuits will be filed. Abstinence of even 12 to 24 hours allows the body to rid itself of carbon monoxide and nicotine, thus improving cardiovascular performance and reducing O.R. mortality.[1] I believe that each doctor would do whatever he or she could to increase the chance of the patient coming through the operation. Losing a patient can be embarrassing, grounds for a tort, and the end of the relationship with that person — including financial.

Cigarettes cause about one third of all fire fatalities each year in the U.S. In California between 1977 and 1981, 62% of the cigarette-caused fires in hospitals were fatal.[2] If you were a patient recovering from surgery with an IV in your arm, a catheter (you know where), and maybe even an oxygen tube up your nose — could you imagine any less needed word than "FIRE!"? Any emergency situation is stressful on patients and staff. Cigarette-caused fire is not excusable, puts all patients and staff at risk, and is the best example that passive smoking can kill nonsmokers. Today, with nicotine gum, risking cigarette-caused fires is not necessary. As for hospital liability, consider the woman who pleaded with her doctor to allow her to smoke — she set her bed on fire, burned herself, and now has the gall to sue because she was permitted to smoke. Passive smoking is unpleasant for most nonsmokers and

"I hope that the doctors of MAG will back the editorial stand presented by Dr. Bill Kenny and the suggestions of Dr. Sheldon Cohen. Both raised several questions for hospital personnel to ponder."

dangerous to many with respiratory or cardiovascular problems.

As Dr. Cohen noted, nicotine is the only addiction that hospital administrators, doctors, and nurses condone. Tobacco is the only addictive drug that the U.S. government (and state governments) actively promote — the growing, manufacturing, and use. Except for Humana Hospital in Miami, I know of no other hospital which serves alcohol to patients, and that is only the champagne celebration dinner for new parents (is that really necessary?). Therefore, generally speaking, nicotine is the only drug addiction which is allowed to pollute the air of others and put them at risk of being burned to death — in *hospitals*. When you think about it, how can hospitals allow smoking, or how can the administrators even propose phony excuses for the continuation of such practices?

Also, administrators should consider the bottom line: how much is it costing them to allow patients and staff to smoke? Besides lung cancer, smoking is one of the key predictors of whether a nurse will have a back injury.[3]

In a North Carolina study of nurses, only 53% of the smokers thought that smoking was important in health problems, but 42% of them thought that nurses should not smoke in public.[4] Another article says that many nurses don't know any more about the health risks of smoking than do laypersons, but that an effective way of helping smoking nurses to quit would be to teach them how to teach others about the dangers[5] (two birds, one stone?).

It may be hard to believe that nursing schools, and the hospitals associated with them, have not presented enough information to help nurses avoid starting and to help them quit if they have started. And it is hard to believe that in 1986, we are still talking about smoking in hospitals. It is now more than 22 years after the first Surgeon General's Report. Smoking is not necessary for life. Nicotine is not an essential amino acid. Yet many defend it as if it were that important. Smoking causes addiction, disease, disability, deformity and mental retardation in offspring, premature death, fires, increased expenses, and litter. It is hard to believe how entrenched this destructive product has become in our society — even to the extent that hospitals would not have moved against its use.

Dr. Cohen began his article with the idea that he should have written the title of his earlier article as, "Smoke Free Hospitals — The Time Has Arrived *Almost*." Well, I believe that 1980 was overdue, that 1976 was overdue, and that hospitals in 1970 should have progressed to a point beyond where they are today. We are a long time overdue for smoke-free health facilities. And we shouldn't have 54,000,000 Americans still hooked on smoking, nor have 350,000 Americans dying from smoking each year either.

Sincerely,

D. Gordon Draves
8967 Blacks Bluff Rd. SW
Cave Spring, GA 30124

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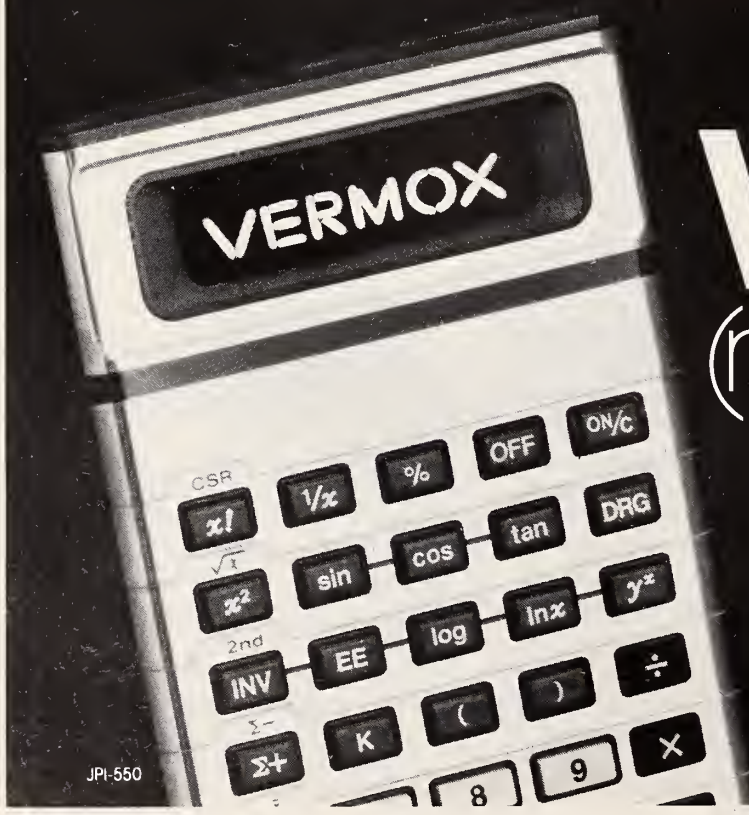
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29-30 — *Sea Island:* **Georgia Chapter, American College of Physicians Annual Meeting.** Category 1 credit. Contact Malcolm Page, M.D., Governor, MCG, Augusta 30912. PH:404/828-0211, x4078.

SEPTEMBER

4-6 — *Atlanta:* **Introduction into Percutaneous Transluminal Angioplasty VI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

4-7 — *Kiawah Island, SC:* **Pulmonary Disease Review.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

7-11 — *Atlanta:* **Demonstrations in Percutaneous Transluminal Angioplasty XVI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

8-12 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:727-5695.

8-12 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

10-12 — *Atlanta:* **MKSAP VII American College of Physicians Review Course.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

11-13 — *Atlanta:* **19th Annual Southeastern Pediatric Cardiology Society Meeting.** Category 1 credit. Contact Dept. of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

14-17 — *Sea Island:* **Georgia Urological Association Annual Meeting.** Category 1 credit. Contact Jack Amie, M.D., Secy.-Treas., 2418 Parkwood Dr., Brunswick 31520. PH:912/264-6362.

14-17 — *Sea Island:* **Georgia Obstetrical & Gynecological Society Annual Meeting.** Category 1 credit. Contact Chester C. Lane, Exec. Secy., 69 Butler St., Atlanta 30303. PH:404/659-0289.

15-16 — *Atlanta:* **Quantitative Thallium Myocardial Tomography.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

15-18 — *Atlanta:* **American College of Emergency Physicians Annual Scientific Assembly.** Category 1 credit. Contact ACEP, P. O. Box 619911, Dallas, TX 75261-9911. PH:214/659-0911.

16 — *Columbus:* **1986 Infectious Disease Update.** Category 1 credit. Contact Mrs. Judy Anderson, Internal Medicine Found., P. O. Box 311, Columbus 31902-0311. PH:404/571-1454.

17-19 — *Atlanta:* **National Conference on Gynecologic Cancer, 1986.** Category 1 credit. Contact Diane Fink, MD, American Cancer Society, Prof. Ed. Dept., 90 Park Ave., New York 10016. PH:212/599-8200, x306.

17-19 — *Savannah:* **10th Annual Neonatology — The Sick Newborn.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

18-20 — *Sea Island:* **Georgia Surgical Society Annual Meeting.** Category 1 credit. Contact William C. McGarity, M.D., Secy.-Treas., The Emory Clinic, 1365 Clifton Rd., Atlanta 30322. PH:404/321-0111 x3322.

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25-27 — *Hilton Head Island, SC:* **Frontiers in Nutrition.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

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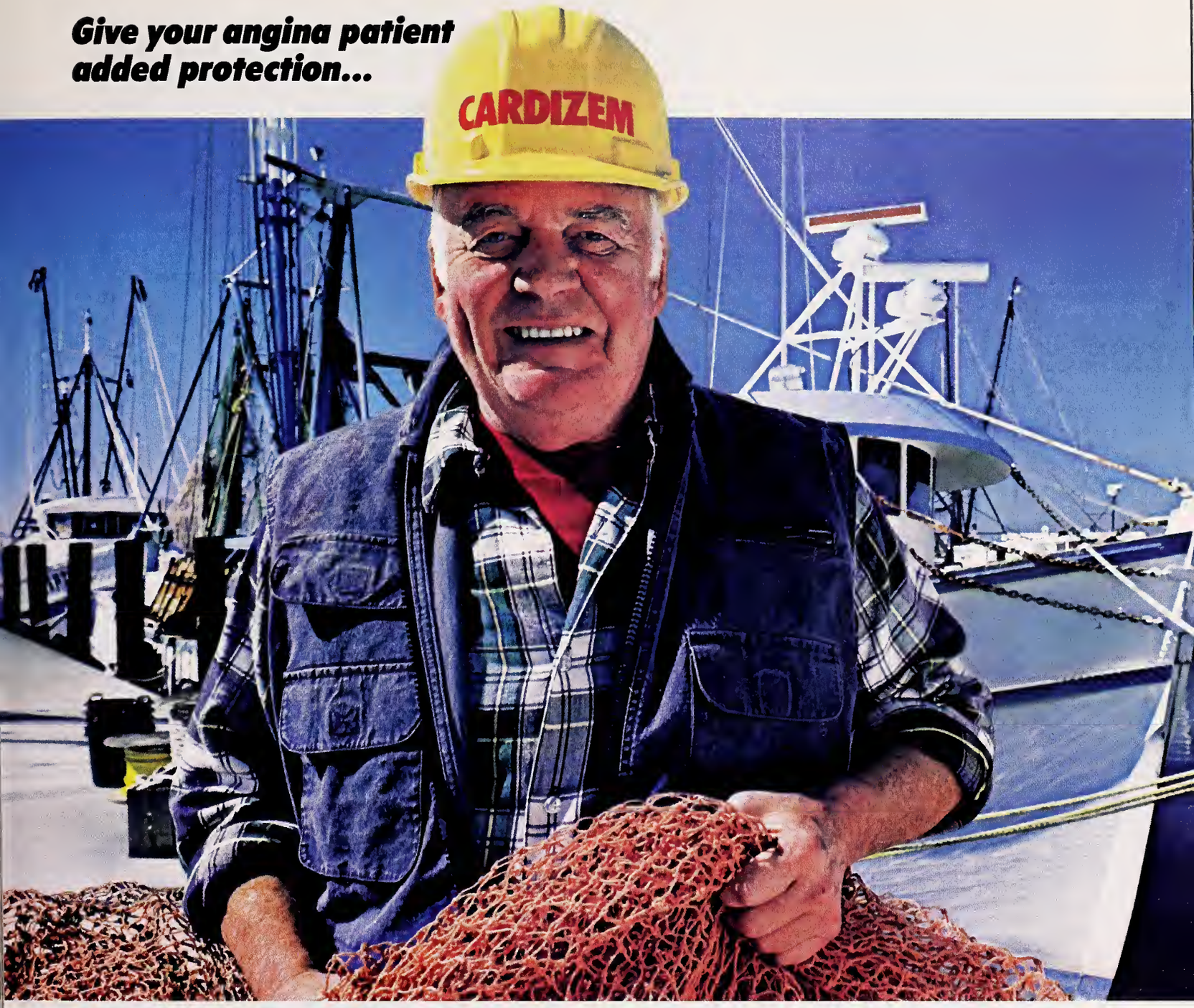
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Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS
Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastrointestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 11/85*
See complete Professional Use Information before prescribing.

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John D. Watson, Jr., M.D.

That may be a catchy title to get you to read this page. However; I am very sincere and wish to suggest to you that this is a vitally important trait that we must maintain. I frequently get copies of letters written by physicians that are sent to some of our legislators and other administrative officials throughout the state. These letters should incur the wrath of all of them against our profession as a whole. I may actually need to preach a little, but it is imperative that we maintain our professional stature and our professional mode of action in communicating with these public and elected employees. We are very prone to react quite vigorously due to the insults that we feel we have received and have a great tendency to use a broad brush in inferring the philosophy which brought this about. I wish to suggest to you that these Representatives and Senators and Administrators are very sensitive people and dedicate a great deal of their self and substance in your behalf. We certainly will not always agree with everything they do, but they are dedicated people and they are acting to the best of their abilities in the jobs that they are holding. It behooves us to keep our cool, to be reserved, to educate, inform, analyze and persuade — but by all means to be courteous, considerate, and professional. Yet we certainly can be very stern in showing our concern about these sensitive items.

It distresses me, however, to see so many of our members and our Auxilians working so hard to try and develop the appropriate image for the profession of medicine and then to have just one or two inflammatory letters, which question everything including the Representatives' and Senators' heritage, threaten our positive efforts. We must refrain at all costs from acting in this manner, and if you are inclined to write a letter in anger, use the old concept of "sleeping on it" a night before mailing it. Also, consider what influence this is going to have on your entire organization and its efforts as a whole. I do not wish this in any way to suggest that I am trying to muffle your criticisms of your elected officials. But there are ways to do it and ways not to do it. We are in a very critical stage in our Legislative Program, and it would be very much appreciated if we were not inadvertently crippled by overly passionate responses.



Conspiracy of Silence



A CONSPIRACY of silence surrounds the issue of chemical dependence in women, particularly professional women. Society's attitudes (and physician attitudes) toward female drunkenness have changed little over the years, despite a general increase in permissiveness toward drinking and drug-taking. The "double stigma" of chemical dependence and chemical dependence in a specific gorup (i.e., not only is it immoral to drink and take drugs, but also extremely unladylike) presents a major obstacle to treatment and recovery unless the integrity of the disease concept is maintained. Alcoholism or other drug addictions in women are further exacerbated, with resulting increases in feelings of guilt and shame, when these women are also members of the health care profession. The ratio of men to women alcoholics has continued to decrease over the past 2 decades (from 10-20:1 to 2-3:1). There is reason to assume that this progressive increase in the number of women who are being identified as chemically dependent is also occurring in the medical profession.

Yet we see that an unusually small number of women physicians are seeking treatment for their disease, and an even smaller number are completing treatment. Why? Denial, lack of education and understanding on the part of their colleagues, misdiagnoses, lack of specialized treatment facilities, financial difficulties, familial and home care responsibilities, fear of failure for a woman in a male-dominated profession, more malignant disease pathology . . . all may be contributing factors. The conspiracy of silence closes in, and it is safe to assume, I think, that dedicated women physicians are being severely imparied and dying from the untreated disease of addiction.

"Competition, high performance and achievements, and successful accomplishments were no strangers to me. Neither was alienation, loneliness, guilt, shame, hopelessness, and desperation by the time I entered treatment."

Chemically dependent female physicians experience conflicts with regard to the complexity of being female in the changing roles of the 1980s, secondary to the training demands of their profession, and as a result of the progression of their disease and their recovery. Chemically dependent female physicians clearly

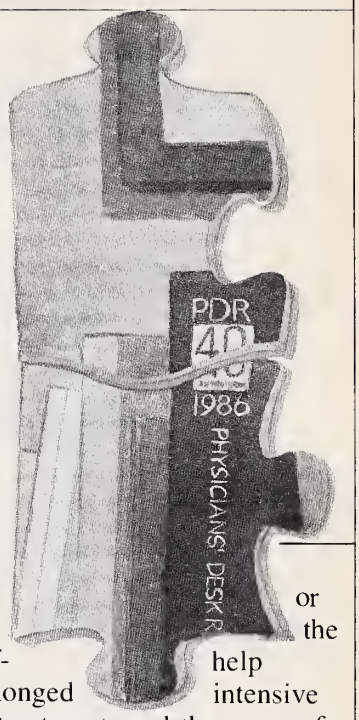


exhibit differences from male physicians in the manifestation of symptoms of their disease, their treatment experience, and their recovery and environment to which they return. These differences are concisely and accurately detailed in the article by Drs. Martin and Talbott on p. 483 of this issue of the *Journal*.

"The conspiracy of silence closes in, and it is safe to assume . . . that dedicated women physicians are being severely impaired and dying from the untreated disease of addiction."

I am a recovering chemically dependent female physician who entered the Georgia Impaired Professionals Program almost 5 years ago. Since that time I have remained chemically free and have also had the opportunity to work with other chemically dependent women professionals. I am also a certified and practicing addictionologist and psychiatrist.

I am the child of an alcoholic. I suffered significant medical complications from my addiction. When I entered treatment, I had few support systems, very few financial resources and found it extremely difficult to even function as a human being. Despite the fact that I was probably as close to death, physically, emotionally, and spiritually as I could have come and survived, I was still (miraculously) performing well at work.

Competition, high performance and achievements, and successful accomplishments were no strangers to me. Neither was alienation, loneliness, guilt, shame, hopelessness, and desperation by the time I entered treatment.

Treatment began with prolonged and painful drug withdrawal which led to an almost psychotic state of mind and a suicide attempt. Alienation, hopelessness, and 'terminal uniqueness' persisted in the all male-oriented treatment ambience. I was the only female physician. High degrees of confrontation and rigid structure coupled with love and care and support eventually allowed me to begin to resolve my guilt, acknowledge my anger, gradually build some sense of self-worth, begin to overcome overt global paranoia, and develop some non-chemical coping skills (which had previously been non-existent). Pain, desperate loneliness, and tremendous rage and fear were my daily companions for many months.

There was a way, however, to make the system work for me. Dr. Doug Talbott, in particular, and other staff understood my disease process and held my hand throughout treatment. I had nowhere to go, no other way to survive, and certainly no other hope to learn to live.

Professional groups, other recovering individuals (regardless of race, sex, or profession), the 12 Step self-help groups, prolonged intensive specialized treatment, and the grace of God have led me to sobriety. Re-entry into the environment I came from was an impossibility after treatment. I depended totally on support from the treatment center staff and recovering members of the 12 Step self-help groups.

Today I am a recovering chemically dependent professional woman who comprehends serenity and knows peace of mind. My self has found an identity, an acceptance and integration of my womanhood, my profession, my personhood, and my spirituality. I am committed to a life of sober living and spiritual growth, which is maintained on a daily basis. Resources were made available to me, and now I have the opportunity to serve as a resource for others. And that's how it works.

I would encourage you to break the conspiracy of silence. Don't leave women physicians misdiagnosed or untreated, because they will die. There is treatment, there is hope, and there is recovery.

Martha A. Morrison, M.D.
Addictionologist, Psychiatrist
3995 South Cobb Dr.
Smyrna, GA 30080

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Special Issues For Female Impaired Physicians

CAROLYN A. MARTIN, PH.D.,
G. DOUGLAS TALBOTT, M.D.

SINCE THE INCEPTION of the Medical Association of Georgia's Impaired Physicians Program (IPP) in 1975, more than 1000 physicians have presented for either assessment of alleged problems with alcohol and other drugs or for treatment of chemical dependence or psychiatric disorders. The IPP Data and Statistics Division, in association with staff clinicians, is presently characterizing these physicians. The number of females in the population (N = 39) is unusually small. With regard to female impaired physicians, there well may be certain difficulties in identification, intervention, and referral which may contribute to the small number and which deserve investigation. However, in the present paper we are concerned with describing some of the special issues of the female physicians who did present to the MAG program for evaluation or treatment, issues which we believe should be addressed for treatment to be maximally effective. We believe that these concerns are especially important since the rapidly increasing number of female medical students no doubt will lead to an increasing number of female impaired physicians in the next decade.

"The IPP women report experiencing treatment differently from the way men experience it."

Murray[1] and McClelland[2] have written extensively about basic personality needs and maintain that women need close relationships to a greater extent than men do and that men need achievement and autonomy to a greater extent than women do. Females who are physicians would be expected to have high needs in both these areas, since they are a part of both domains. They are women, and they are also achieving in the practice of medicine, a male-oriented profession where autonomy is not only expected but also necessary. When female physicians are chemically dependent, these two domains plus a third set of factors must be dealt with to foster recovery, that of the disease process and the implications of it. All three domains must be adequately addressed for successful treatment to occur.

The literature on female physicians who are chemically dependent is extremely scarce.[3] In fact, a computer search turned up no published study to date, although one unpublished study of a single treatment population was found.[4] (In addition to Tatham's study,[4] the authors learned of a study not yet published by Bissell. Her population consists of female physicians who are alcoholics, members of Alcoholics Anonymous, and sober at least one year.) Information for the current article was derived from interviews with key staff members and former patients of the Georgia Impaired Physicians Program as the basis for a quantitative study to characterize this group. The issues expressed in the interviews deserve examination in their own right and are summarized here.

Dr. Martin is a counseling and consulting psychologist; Dr. Talbott is Program Director, Georgia Impaired Physicians Program, and Director, Alcohol and Drugs, Ridgeview Institute, Smyrna, GA. Send reprint requests to Dr. Martin at 2694 Headland Dr., East Point, GA 30344.

Overlapping Domains of Female Physician

Chemically dependent female physicians are products of conflicting forces in their environment. In addition to having a psychosocial biogenetic disease, they live in a complex world comprised of overlapping and possibly conflicting domains. First is the domain of being a female in the U.S. in the last half of the 20th Century, when roles are changing. How these women accept their femaleness — that is, how they think, feel, and act in this domain — influences how they think, feel, and act in the other domains of their lives. In 1962, Bettelheim[5] originally noted the ambiguities faced by women growing up in the U.S. with equal opportunities and rewards at school but traditional sex roles too often the ideal after school days are over. He pointed to the confusion girls experience over trying to decide just when to be equal and when to be feminine. This confusion is still in evidence in many of the female impaired physicians described in this paper and probably in other professional women as well.

" "Chemically dependent female physicians are products of conflicting environmental forces. " "

The second domain over which many women experience conflict is that of vocation and profession. The females described here work in the medical field. In this field, women have developed certain specialized knowledge, skills, and values. They have delayed gratification and may have acquired unrealistic and unrealized expectations of the emotional and social rewards derived from practicing medicine. They, just as male physicians, are committed to fight illness and enhance quality of life through their own skills and compassion, with the use of medication and/or surgery along with their advice to patients about developing habits of good health. Their specific professional role as physicians plays a part in the development of their self-concept which includes the appropriate rights and responsibilities that accompany that role. They have certain concepts regarding their role in the health care domain and its meaning for themselves and others.

Thirdly, these are chemically dependent female physicians. The progression of their disease and the development of recovery are two processes which are believed to interact with the other two domains — femaleness and medicine. Until recently, women have not been included in studies of chemical dependence. When they have been included in such studies, they have often been said to differ from men in three general ways: (1) in the progression of the disease and accompanying life circumstances, (2) in their treatment experience, and (3) in the environment to which they return (see Gomberg's thoughtful literature review[6]). These three areas are pertinent to a discussion of chemically dependent female physicians.

The Disease and Life Circumstances

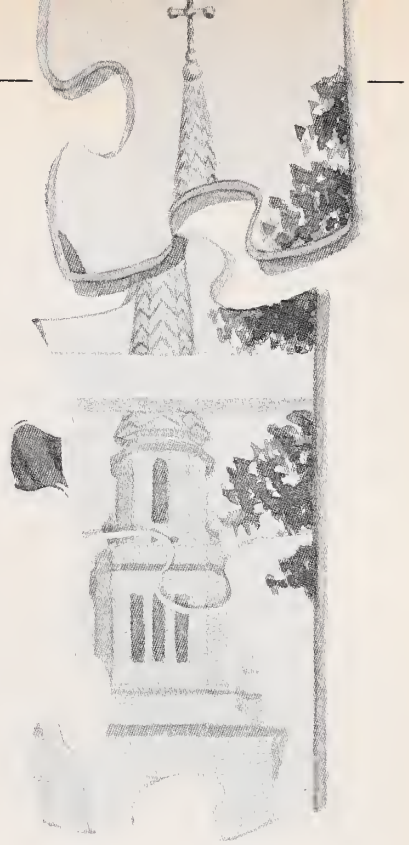
In a survey of the general literature on women and chemical dependence, studies were found that showed differences between men and women in a number of respects. For example, Hesselbrock[7] found that when compared to men, female subjects began regular drinking later than men but arrived in treatment earlier — that is, after fewer years of problems related to alcohol and drugs. Bissell[8] found a shorter time between regular drinking and related problems for women than for men. Lisanksy[9] and Bissell[8] found alcoholic women more likely than men to report being children of alcoholics, and Lisansky[9] found women to link problem drinking to a precipitating adult crisis.

Women are said to have medical complications more often than men do[10] and to have fewer people in their life support systems,[8] fewer financial resources,[7] and fewer job possibilities.[7] These conditions may be true for women in general, whether or not they are chemically dependent.

" "The female physicians seem to come to the Program with fewer coping skills, less self-esteem, and less ability to withstand the stresses involved in the IPP treatment milieu than the men do. " "

Chemically dependent women often report adopting the traditional female role in the extreme, believing that they do not measure up and that by consciously working at being "super feminine" they will thereby enhance their poor self-concept and improve dysfunctional relationships. Wilsnack[11] found that at the same time high achieving women adopted the super feminine orientation in personal perceptions and interpersonal relationships, they unconsciously adopted a traditionally male orientation with regard to work and accomplishment. Thus, they experienced internal as well as external conflict.

The female impaired physicians who have presented to the Georgia IPP appear to be high achievers in their medical training, which is in line with Bissell's findings[8] for college women and female health professionals. Female physicians may experience more stress than male physicians, since women are relatively new to the field of medicine with few role models[3] and without a clear sense of where to go for support and guidance in professional matters. They seem to have even fewer resources for support with personal problems. Many female physicians express a certain sense of alienation from the medical community.[3, 12] In fact, of those coming to the Georgia IPP, many do not



identify with the so-called "M-Deity Syndrome" (as the omnipotent, omniscient healers men may identify with), but see themselves more as "Florence Nightingales" (dedicated, hard-working, unassuming care givers).

Most of the stories women in the medical community hear, the traditional role models they find available and the guidance they receive, come from men and naturally express men's perceptions and experiences. Some female physicians reported having been faced with possible sexual entanglements when attempting to deal with men on an academic or professional level. In addition to ordinary sexual attraction, other dynamics such as power and aggression seem to operate in these cases. Of course, in some measure, this has been true for other women as well. Traditional sex roles tend to surface in the midst of professional negotiations and complicate matters for women who seek acceptance both as women and as professionals as well as accomplishment in the two areas.

Treatment Experience and Salient Issues for Female Physicians

Treatment for chemical dependence begins with physical withdrawal from the substance and personal acceptance of the disease. Then patients learn to deal with conflicts and feelings as well as real assets and limitations as they begin interacting with their world soberly. Treatment issues for women have been said to center around building trust and dealing with anger,[11, 13] as well as the general issues for female physicians of establishing identity and resolving confusion and conflict over sex roles.[11, 12] These concerns must be dealt with in addition to the traditional treatment goals of beginning the process of making peace with the past and of developing autonomy and non-chemical coping skills needed by women as well as men. Another area that has high priority for a large number of women is developing occupational competency, vocational skills, and ways of marketing them.[13] Female physicians have expressed the need for learning how to manage a practice and negotiate business agreements as well as manage investments.

The IPP women report experiencing treatment differently from the way men experience it. The rationale for the specialized treatment program of the Georgia Impaired Physicians Program is that doctors need true peer group therapy to deal with their feelings and their distorted beliefs as well as to develop non-chemical coping skills. The ambience of the program is male-oriented, since the majority of the population is male. Men with similar backgrounds and similar training are thrown together from the beginning of treatment. Direct confrontation is used to break through the psychological armor the male physician has likely built up over the years to wall off his feelings. This defense may have helped him function well professionally in crises which could be personally distressing.

> ***"An important issue for the female physicians . . . is to acknowledge the need to integrate themselves and perceive their own power in determining who they are and will be. . . ."***

Female physicians have entered the Georgia program singly more often than in groups. After inpatient care of one month, they have been placed in halfway houses, some of which have rapid turnover of patients. For most non-health professionals treatment ends after 29 days. If extended, it is not for long. Other female health care professionals often leave early due to their inability to accept the program or to problems with family or finances. Female physicians are not members of a group of peers with whom they progress through the stages of recovery and with whom they identify personally as well as professionally over the 4-month treatment program.

During the first 5-year period when women were present in the Georgia Program, only 28 remained for residential treatment beyond evaluation. Because so few women come through the Program, they are not afforded the same opportunities as men are for developing non chemical coping skills in the group living environment of the latter phases of treatment.

Women by necessity are placed in residences with other women who often have vastly different backgrounds and interests. Even if the female physicians are with other health professionals, these are likely to be nurses (rather than physicians), who tend to have different experiences, roles, and professional issues to deal with. The female physicians seem to come to the Program with fewer coping skills, less self-esteem, and less ability to withstand the stresses involved in the IPP treatment milieu than the men do. They have fewer ways to gain ego strength during treatment due to lack of role models and lack of interaction with "true peers" in residential living. (This may, of course, be influenced by the male-oriented program.)

In addition to the above issues women face in treatment, the female doctors coming into the Georgia Program seem to be in touch with their feelings more than the men are, al-

though this may not be readily evident due to their lack of trust and unwillingness to share them. Many women are afraid to express their feelings, since they perceive themselves as living in a hostile environment, and they bring their fears and perceptions into treatment with them. They often report having experienced sexual, physical, and emotional abuse as children. This violence was, for the most part, perpetrated by members of their own family or known members of their community. Women abused in this way learn to hide their feelings to protect themselves from further violence, and many expressed uneasiness over the volatile nature of their negative feelings.

"For women, (the task of recovery) may be accepting responsibility for their lives and using appropriately the power they do have."

The predominant concern of such women in the Georgia Program seems to be the development of enough trust in the therapeutic environment to begin to open up and face the issues of their lives, to accept their feelings about the past and the present, seeing their own part in what has happened to them and what is currently happening. Of course, that requires confrontation, but usually not to the degree needed by most of the men. Some women leave the program early for fear of what the confrontation will do to them, others for fear of what will happen to their spouse, children, or practice.

If women stay in treatment, their pain, loneliness, and fear are all likely to surface with self-disclosure. These feelings are often accompanied by a sense of rage at having been used and rejected by either parents or others they looked to for love and nurturing as children. They also express rage at being considered by society as more deviant in their chemical dependence than men, with all the stigma associated with it, and deviant in their attempts to achieve and be accepted in a male-dominated profession. (This may be changing due to the increased numbers of women in medical training.)

What Women Need in Treatment, or the Tasks of Recovery

To recover from chemical dependence, women may need different things from what men need in the way of treatment experiences. Yet, as mentioned earlier, female physicians do share some of the same domains with men, and in those areas some of the same treatment techniques and conditions may prove therapeutic for both groups. Professional issues and related stresses are certainly shared, as are universal human needs. In addition, many women find it impossible to trust another woman until they have been in treatment for some time. It is often a sensitive, accepting male staff member who helps the woman unlock the door to developing trust for other women.

In the areas of sexuality and spirituality, female physicians may do better with other women than in a mixed group of physicians, if these women can accept them, can understand them, and have similar experiences to be shared. These areas may be dealt with later on in treatment, after the physicians have learned to trust members of their own sex. Those with a homosexual orientation will need to know it is safe to talk about their feelings and experiences before they are willing to share individually or in a group of predominantly heterosexual men or women.

For the most part, female physicians coming to Georgia's IPP seem to have acquired, over a long period of time, a lack of trust for people outside medicine as well as for those within it. Overall, many have experienced their total environment as hostile, and for a good reason. This can change and does for some women. It will become easier for women to trust the treatment environment as they comprise a larger segment of that population and as they are able to tell their stories, name their own demons, and take their own inventories as chemically dependent women and female physicians. As they see other women in medicine who are staying sober and experiencing some measure of serenity, they will gain strength and hope. For them, the fellowship of sisterhood is as important and healing as the fellowship of brotherhood currently is for the men in the Program. And spiritual growth can result in both cases.

Men in recovery talk about needing to get rid of their big egos, to look outside themselves to achieve the proper focus for their lives, and to be sensitive to the feelings of others. Women, for the most part, express a sense of fragmented egos, of having looked after others and having looked to others in the past for their definition of themselves. They looked in one direction for sexual validation, in another for professional validation, and in yet another for spiritual validation, if sought at all. Thus, they often perceive these areas as either mutually exclusive, or at least split off from each other.

"Women, for the most part, express a sense of fragmented egos, of having looked after others and having looked to others in the past for their definition of themselves."

An important issue for the female physicians, then, is to acknowledge the need to integrate themselves and perceive their own power in determining who they are and will be, what they currently do in the various areas of their lives, and what they will do, rather than in continuing to see themselves as dependent on others and all

too often as helpless victims of those they turn to for help (without seeing that they actively participate in their own victimization).

Women have traditionally looked to people outside themselves for reinforcement. They need to accept the locus of control of reinforcement as being lodged with a spiritual power rather than with men or women who are significant to them. For men, the task of recovery may be giving up the desire for complete power over their own lives and the lives of those around them. For women, it may be accepting responsibility for their lives and using appropriately the power they do have. For both men and women, it is believed necessary for them to accept that the quality of their sobriety is determined by their conscious contact with the God of their understanding.

Too often spiritual validation or affirmation has not been achieved by women regardless of their professional and personal achievements, and they express a sense of unworthiness, of being a sham. Their insides don't match their outsides, and they don't have a way to talk about it. Sometimes they are engulfed with shame, in addition to whatever real guilt they experience over actions they engaged in during their active addiction. In recovery, women are helped to see that by focusing on shame or even guilt they can become frozen in self-pity, and that to get better they must acknowledge wrong deeds, make amends, and then let go of the past.

Resources for Reentry

After treatment, women often return to an environment devoid of major emotional and financial support.[7, 13] Having lost their spouse and sometimes their children as well as friends and jobs, many women find the only support they have is the treatment center community network and social services. A commonly cited statistic is that nine out of ten wives stick by their alcoholic husbands, while nine out of ten husbands leave their alcoholic wives.[13] This seems to apply to female physicians as well as women in general.

With the additional environmental problems and emotional scars brought to treatment by female physicians, with the limitations of the treatment milieu described above, and with the problems awaiting them at home, how, then, do any women who come to the Georgia Program manage to do well? The women who complete the Program and stay sober with some measure of serenity are those who learned how to make the system work for them (very few others managed to stay sober).

"It will become easier for women to trust the treatment environment as they comprise a larger segment of that population and as they are able to tell their stories . . . and take their own inventories as chemically dependent women and female physicians."

Some few of the women have had good experiences in the past and go back home to intact networks, but most do not. Those who don't must rely heavily on the treatment center staff to help them. If they are able to accept what is offered, they recognize the resources that are available and put them to work. They find individuals they can identify with and accept help from, regardless of sex or occupation. They also locate people in the home environment who can help them make the transition after treatment or they change environments. They go to community Alcoholics Anonymous/Narcotics Anonymous (AA/NA) groups and often to another primary reference group as well, and they commit themselves to sober living and spiritual growth, with or without a family and with or without a social network. Yet they do not attempt this alone. They accept that all their human resources have clay feet and that they do, too. They also accept that help can be obtained from imperfect sources. As they reach out to available resources, they in turn become a resource for others. And that, after all, is how it works for women as well as men.

Conclusions

For recovery to continue to be an active healing process, at some point these women accept themselves and the world for what they are. They accept that their past experiences did occur and were interpreted by them in ways that made sense to them then, but all of it is now over. And the anesthesia they used to keep from dealing with anything conflicting is now gone. They accept that the present is to be lived spontaneously and fully and without fear. They do not have to project into the future. They know the future will be shaped by a succession of 24 hours lived successfully one at a time.

In addition, they find something greater than themselves that they can believe in. Many find a deep spiritual faith which they never knew before and which may or may not be religious. Others reactivate their childhood faith and grow in their church. Still others honestly express a lack of faith in anything beyond the AA program but accept that there is a "Higher Power" and remain open to receive faith if it should be given to them. Erikson's[14] ego integrity is a term which may roughly designate the stage of development we are describing: it is an acceptance of one's life the way it has developed and now is the way it should be. The AA recovery program also helps an individual to derive serenity from one's task to live each 24 hours with gratitude and a sense of awe, practicing spiritual principles in all areas of life and providing service to others.

Bankson[15] adds yet another dimension to this stage for women which is applicable to recovering female physicians; i.e., that they lose their sense

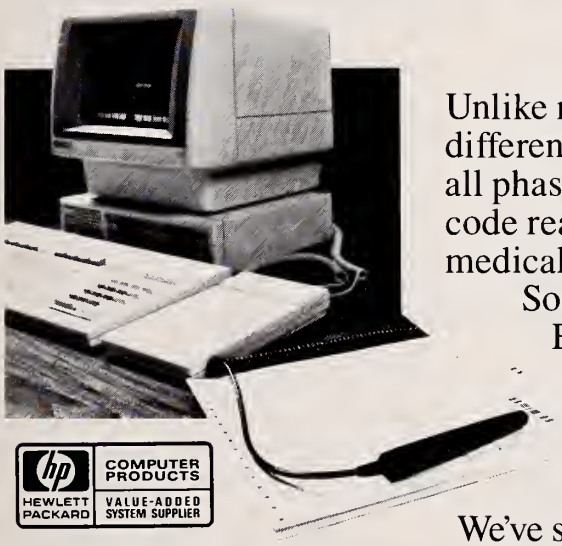
of innocence, their position of non-involvement, and take responsibility for integrating the fragmented aspects of their lives (their sexuality, their spirituality, and their vocation) to become whole persons. They then can accept responsibility for expressing who they really are and using their talents to function in a number of domains of life, whether these domains are traditionally female or not, and participating in both the rewards and the discipline of each. They can be at home as females and as peers in the medical community. Yet they are still recovering because recovery is a process, a daily reprieve contingent on their spiritual condition.

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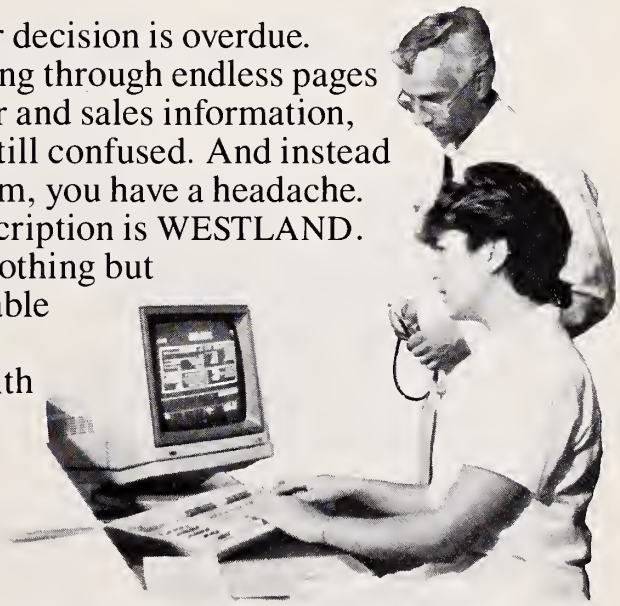


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Alcoholism And Other Drug Addictions: A Primary Disease Entity

G. DOUGLAS TALBOTT, M.D.

Characterized as the most untreated treatable disease in America today.

AMERICAN CONTINUES to have difficulty in recognizing alcoholism and other drug addictions as a disease.[1] Yet scientific facts have established these addictions as a primary psychosocial, biogenetic disease.[2] Historically, this is based upon the fact that its primary symptom, compulsivity, is behavioral, so traits such as being weak willed, or having a lack of motivation, will power, or "guts" are attributed to the cause of alcoholism and drug addictions. Until relatively recently, this fallacy was aggravated by a fundamental lack of knowledge. We have learned more in the past 15 years about the disease of chemical dependency than in the past 5,000 years. But the false perceptions, bias, and prejudices persist. This is no longer tolerable, however, as this disease entity, if diagnosed early and vigorously treated, has a very high rate of recovery. It is characterized by many as the most untreated treatable disease in America today.

"Alcoholism and drug addiction does not come in bottles or pills, since dose, duration of use, or volume does not distinguish between an abuser and an addict."

The Medical Association of Georgia's Impaired Physicians Program has just recorded its 1100th physician its 1600th impaired health professional. Paramount among the initial therapeutic obstacles in in treating these doctors, nurses, pharmacists, and dentists are the ignorance and misconceptions concerning the disease precept of chemical dependence.[3] It has become critical to review the elements of the disease precept with physicians and other health professionals, for it is they who must assume leadership in changing the knowledge, attitudes, and cultural responses to alcoholism and drug addition.

The current attitudes regarding alcoholism and other drug addictions which view it as a weakness, a moral or ethical problem, a bad habit, or "lack of guts" are now beginning to disappear as health professionals are becoming more educated regarding the disease entity.

Leprosy, epilepsy, and mental illness have all suffered from similar cultural prejudices in the past. Lepers were made to wear cowls and cowbells so they could be shunned, psychotic patients were placed in chains, and epileptics were burned at the stake because they were believed to be pos-

Dr. Talbott is Program Director of MAG's Impaired Physicians Program, and Director, Alcohol and Drugs, Ridgeview Institute, 4015 South Cobb Drive, Ste. 100, Smyrna, GA 30080. Send reprint requests to him.

sessed by the devil. Inevitably, the pattern appears to be that first they are shunned, then the clergy castigates their morality from the pulpit, then laws are passed and legal sanctions evoke to place them in jail, then they are ignored, and finally they are accepted as diseased. So it has been with all the diseases listed above, and so it is with alcoholism and drug addiction.

Since complusive behavior results in inebriation, stupor, or violence in the truly diseased chemically dependent person and is not distinguished from misuse or substance abuse, these diseased persons must suffer these experiences as those with the other diseases have had to do. The fact that alcoholism and drug addiction is now afflicting more women and adolescents at an ever increasing rate compounds the confusion people experience in trying to classify the sufferers from a purely cultural perspective as shown above. But as the neurobiologic, neurotransmitter, and genetic basis of compulsion is becoming more apparent and distinction between the abuser and the diseased alcoholic and drug addict is becoming evident, the acceptance by health professionals of the disease precept is slowly becoming a reality.[4]

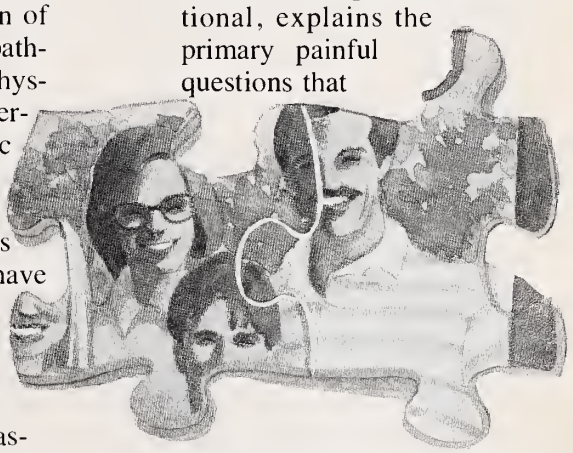
The Medical Definition of Disease

The medical definition of any disease, as well as alcoholism and other drug addictions, is an abnormal state of health distinguished by five specific characteristics. These characteristics are as follows:

1. ***It must be a primary condition and not a secondary symptom.*** Udel, et al,[5] have assumed a leadership role with their neuropsychologic psychiatric triage of 500 physicians and an additional 500 laymen who were evaluated for alcoholism and other drug addictions. The results of their meticulous psychologic, neuropsychologic, and psychiatric assessment clearly demonstrated that 94% of these physicians do not have a dominate, primary psychiatric diagnosis to account for their compulsivity, the primary symptom of their disease. Seventy-three percent, on the other hand, have significant secondary emotional problems with their disease of chemical dependency, such as depression, anxiety, anger, guilt, etc. Patients continue to drink, use repeatedly and compulsively as it destroys and adversely affects their lives with a 94% normal psychiatric triage. Therefore, primary psychiatric illness can no longer be scientifically embraced as the cause for their compulsivity. Alcoholism and drug addiction does not come in bottles or pills, since dose, duration of use, or volume does not distinguish between an abuser and an addict. Alcoholism and drug addiction is a primary disease entity, not a secondary symptom.
2. ***There are specific anatomic and physiologic changes.*** With this disease, within the last decade, almost every organ system has been incriminated by demonstration of specific addictive changes: pathologic, biochemical, or biophysiologic.[6] Recently, in the understanding of primary alcoholic heart and lung disease, the role of drugs including alcohol on the hematopoietic system has been described. Recent years have shown far more impact on the hematologic and neurologic systems than was originally described, and this has also been true of the gastrointestinal and osteogenic systems. Advances in electronmicroscopy and dimensional radioactive-radiographic studies have made possible identification of these specific anatomic and abnormal changes secondary to the disease of chemical dependence as opposed to abuse of drugs.
3. ***The disease carries a recognizable set of signs and symptoms which permits accurate diagnosis.***[7] Alcoholism and other drug addictions fulfill these criteria, although unfortunately the major diagnostic criteria are not discernible until the until the disease is established. There are seven such signs and symptoms:

 A. *The continued use of the drug despite adverse and lethal consequences to an individual's life* — This compulsivity is the primary and number one symptom of this disease. Two critical factors influence the primary symptom of compulsivity:
 a. It is not related to volume, dose, or duration of drug intake;
 b. Extensive and exacting psychiatric, psychologic, and neuropsychologic triage shows that it is not a result of an underlying primary psychiatric disorder, although the disease entity produces severe secondary emotional symptoms.

 This compulsive, irresponsible, repeated use of the drug, which is illogical and irrational, explains the primary painful questions that patients, family and friend usually ask: "Why do they continue to use the adverse and lethal consequences to their life?"



 B. *Destruction of their physical health* — As outlined above in discussing the anatomic and biophysical changes, the disease of chemical dependence impacts almost every organ system in the body as the drug or drugs are consumed. Differentiation from the abusive organ changes is now possible. It is apparent with our new elec-

"As the neurobiologic, neurotransmitter, and genetic basis of compulsion is becoming more apparent and distinction between the abuser and the diseased alcoholic and drug addict is becoming evident, the acceptance by health professionals of the disease precept is slowly becoming a reality."

tronmicroscopy and nuclear radiographic techniques to differentiate abusive changes from true addictive changes in the body tissues.[8] It is also appreciated that abuse can kill but it is a different anatomic and pathologic entity that causes death than that resulting from the disease of chemical dependence.

C. *Destruction of emotional health* — The addict quickly becomes emotionally incapable of coping with his or her life. The coping skills are either arrested or lost. While the abuser, principally through the mechanism of controlled drinking and drug use, keeps the basic fabric of his or her emotional health intact, albeit at times severely disturbed, the chemically dependent person's emotional status disintegrates.[9] Excessive mood swings, uncontrolled anger, free floating anxiety, depression, and a host of other emotionally painful symptoms increase with the progression of the disease of alcoholism and drug addiction.

D. *Destruction of their social, spiritual, and cultural life* — People's lives are composed of their physical and emotional health, and their relation to the community, church, job, and most important to the family. These aspects of life initially undergo subtle change and then inevitable destruction from the disease of chemical dependency. The family or significant others are the first to feel the impact of the disease and destruction is a determined consequence if they do have alcoholism and drug addiction and continue the compulsive use of drugs.

Therefore, the first four diagnostic signs are the primary indicators of the disease; alcoholics or drug addicts are individuals who compulsively continue to use the drug or drugs despite adverse lethal consequences to their lives.

There are three other diagnostic signs of the disease:

E. *Abnormal change in tolerance* — While the drug tolerance of the abuser may initially build slowly, it will often flatten out and then continue to build at a very slow rate. Not so for the addict. Initially, tolerance will be very high and often rapid, only to fall abruptly in an individual's life at a specific but undetermined time.[10] This fall in tolerance occurs in the sedative hypnotic drugs but not in the opiates nor the stimulants.[11] The changing tolerance is often responsible for overdoses and death.

F. *Withdrawal* — This usually accompanies the disease and is progressively more severe. However, severe abuse or lactrogenic abuse may also product a milder, temporary withdrawal. However, when one sees true withdrawal, not merely a "hangover" (if the drug is alcohol), then one must consider the diagnosis of chemical dependence.

G. *Blackouts or true drug amnesia* — Alcohol being a derivative of ether may produce with abuse a state of unconsciousness, but the drug amnesia or "blackout" are indicative of the disease of chemical dependence and are differentiated from the "pass out" of abuse.[12] Blackouts can occur with addiction to any of the sedative hypnotic drugs and with the narcotic agents, but does not occur with addiction to stimulants or hallucinogens.[13]

These seven signs and symptoms are the diagnostic criteria that distinguish the disease from the state of abuse or misuse of the drugs.[1]

There are two other specific characteristics that distinguish this disease:

4. ***The disease has a predictable, progressive course.*** The course of the disease of chemical dependence is progressive, chronic, re-

lapsing, and lethal if untreated.[14] Since the inception of Alcoholics Anonymous by a physician and a stockbroker/counselor, the inevitable fate of the untreated alcoholic has been described as jail, the mental institutions, or the cemetery as the mental, emotional, spiritual, legal, and physical life of an alcoholic and drug addict undergoes destruction. That is why it is so sad and scientifically invalid to hear the comment "if you could only learn to drink like your uncle, or you father" when it is apparent that the course of the disease will not permit this and their uncle or father were users or abusers and not diseased. The course will be inexorable if untreated; the rate of deterioration and destruction is determined inevitably by the interaction of the drug(s), the individual, and the environment.

5. ***There are established, etiologic agents or causes responsible for the disease.*** These have not yet been specifically defined in alcoholism or other drug addictions, as they have been with cancer and myocardial infarcts. We know that the agent is alcohol, but alcohol is used to a far greater tolerance and duration by some abusers, so it is not the agent alcohol alone but the way the agent reacts in the body as is also true in diabetes. In the disease paradigm, we describe the agents as drugs, the host as the individual, and the environment as the culture or the community the individual lives in. This does not however, adequately explain the variance between the abusers and addicts when we know that the abuser may use more, use it more frequently or longer, and still not develop the disease with its primary compulsivity and the other six signs and symptoms.

The Heuristic Model

The heuristic model in the Georgia Impaired Health Professionals Program is used effectively as a biogenetic model precipitated by the psychosocial abusive factors. It has been postulated and evidence is now accumulated to confirm this paradigm, that with the genetic predisposition, the addict, the diseased individual, undergoes molecular depletion of the endorphin-enkephalin metabolism within the ancient, reptilian-derived survival hypothalamic brain. During the diseased state, this survival brain (in which "concrete" thinking and instinctual behavior have been derived for survival of the species) undergoes depletion of the neuromolecular system involving the neurotransmitters.[4] Thus, a message is sent to the body, established eons of times ago, that the species will die if the molecular balance cannot be restored. Compulsive drug taking and intake serves this function despite adverse and lethal consequences to the individual. This is the dynamic of compulsivity — the primary symptom of the disease. This is also the dynamic of the lethality of the disease.

To manifest itself, the disease, must have the genetic predisposition accompanied by abuse, as abuse itself will not produce the disease.[15] There are millions of people in this country who have the genetic predisposition, but who for cultural, health, personal, or religious reasons will not abuse, so they never manifest the disease. It is true that in this disease we have not yet identified a single etiologic agent, but neither have we done this in cancer, diabetes, or myocardial infarcts. Yet we clearly identify individuals with these conditions as diseased.

The heuristic model described above is professionally accepted in the Georgia Impaired Physicians and Health Professionals Program. The clarification and the use of this heuristic disease model is a major factor in attracting the largest treatment population of impaired physicians in the continent. Current investigators in the Georgia Program are realistic in appreciating that the classification and the clarification of the neurotransmitter systems and the genetic characteristics will change, but the basic paradigm is sound. Particular and intensive work needs to be done on the

> ***"The compulsivity to continue to use the drug despite adverse and lethal consequences . . . is the primary and number one symptom of this disease."***

"The chemically dependent person undergoes molecular depletion of the endorphin-enkephalin metabolism within the ancient, reptilian-derived survival hypothalamic brain."

genetic characteristics as the X-Y chromosome manifestations remain obscure, awaiting further clarification of the allele penetrants and the oncogenes. Also, it is apparent that as the neurotransmitters in the endorphin-enkephalin metabolism become clarified in terms of receptor sites, further knowledge will be available about whether the drugs either block the receptor sites, destroy production, or interfere basically with the transmission. However, the basic heuristic model remains fundamentally sound.

Summary

It is therefore apparent that all five of the essential disease criteria are fulfilled by alcohol and other drug addictions. Chemical dependency is truly a primary, psychosocial, biogenetic disease. America continues to have difficulty in understanding the behavior of alcoholics and drug addicts in their continued intake of the drug with its adverse destructive results to their lives. The American culture does not appreciate the difference between the controlled, abusive user and the uncontrolled addictive user. They are not knowledgeable about the biogenetic components in the instinctual hypothalmic brain which dictate, in the face of the genetic predisposition, the compulsivity of the diseased individual. As America moves deeper into our chemical culture and alcoholism and drug addicts become more common, people continue to assign such false labels as weak willed, bad, evil, no conscience, no guts, or crazy to the diseased alcoholic and drug addict. False comparisons, ignorance, and prejudice play major roles in preventing America for seeing chemical dependence as a true disease.

When one views the disease precept of alcoholism and other drug addictions as it now exists from both an historic and future standpoint, the paramount role of Alcoholics Anonymous and Narcotics Anonymous in changing attributes is apparent. Fifty-three years ago the founders, a physician and a stockbroker/counselor, recognized alcoholism as a primary illness, with recovery depending on total chemical abstinence. Today, Alcoholics Anonymous (A.A.) continues to be the most effective treatment modality for this disease, particularly as it relates to the long-term aftercare from detoxification and initial treatment. A.A. continues to provide the most effective tools, implementation, and plans for non-chemical coping.

The struggle remains to educate the American people and even to educate a significant number of health professionals in the fact that alcoholism and other drug addictions is truly a primary, psychosocial, biogenetic disease. It is established that the alcoholics and drug addicts who understand, accept, and surrender to the disease precept have a much improved recovery rate. Over 200 years ago, the words of Alexander Pope were truly prophetic, as they now relate to the illness of alcoholism and other drug addictions; he said, "To know ourselves diseased is half the cure."

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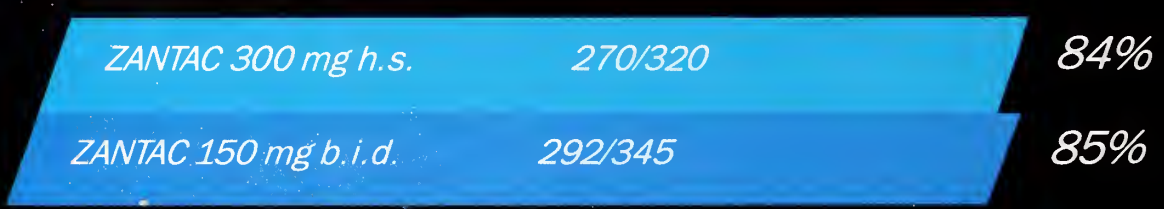
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Controls nocturnal acid to relieve pain and heal duodenal ulcers

Heals active duodenal ulcers after 4 weeks in most patients*[1]



In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

***Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.*[1]**

Zantac® 300



ranitidine HCl/Glaxo 300 mg tablets

Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications which decrease gastric acidity are administered.



*It is not known exactly how much acid inhibition is needed to heal ulcers.

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See next page for references and Brief Summary of Product Information.

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References: 1. Data available on request, Glaxo Inc. **2.** Ireland A, Colin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2:274-275. **3.** Colin-Jones DG, Ireland A, Gear P, et al: Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of active duodenal ulcer. Most patients heal within four weeks. Studies available to date have not assessed the safety of ranitidine in uncomplicated duodenal ulcer for periods of more than eight weeks.
2. Maintenance therapy for duodenal ulcer patients at reduced dosage after healing of acute ulcers. No placebo-controlled comparative studies have been carried out for periods of longer than one year.
3. The treatment of pathological hypersecretory conditions (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of active, benign gastric ulcer. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated. Studies available to date have not assessed the safety of ranitidine in uncomplicated, benign gastric ulcer for periods of more than six weeks.
5. Treatment of gastroesophageal reflux disease. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy.
2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSAGE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

OVERDOSAGE: There is no experience to date with deliberate overdosage. The usual measures to remove unabsorbed material from the gastrointestinal tract, clinical monitoring, and supportive therapy should be employed.

Studies in dogs receiving doses of ZANTAC® in excess of 225 mg/kg/day have shown muscular tremors, vomiting, and rapid respiration. Single oral doses of 1,000 mg/kg in mice and rats were not lethal. Intravenous LD_{50} values in rat and mouse were 83 and 77 mg/kg, respectively.

DOSAGE AND ADMINISTRATION: Dosage Adjustment for Patients with Impaired Renal Function: On the basis of experience with a group of subjects with severely impaired renal function treated with ZANTAC®, the recommended dosage in patients with a creatinine clearance less than 50 ml/min is 150 mg every 24 hours. Should the patient's condition require, the frequency of dosing may be increased to every 12 hours or even further with caution. Hemodialysis reduces the level of circulating ranitidine. Ideally, the dosage schedule should be adjusted so that the timing of a scheduled dose coincides with the end of hemodialysis.

HOW SUPPLIED: ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

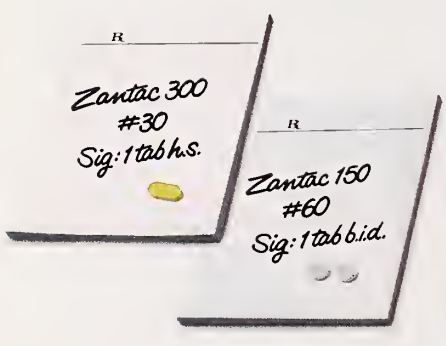
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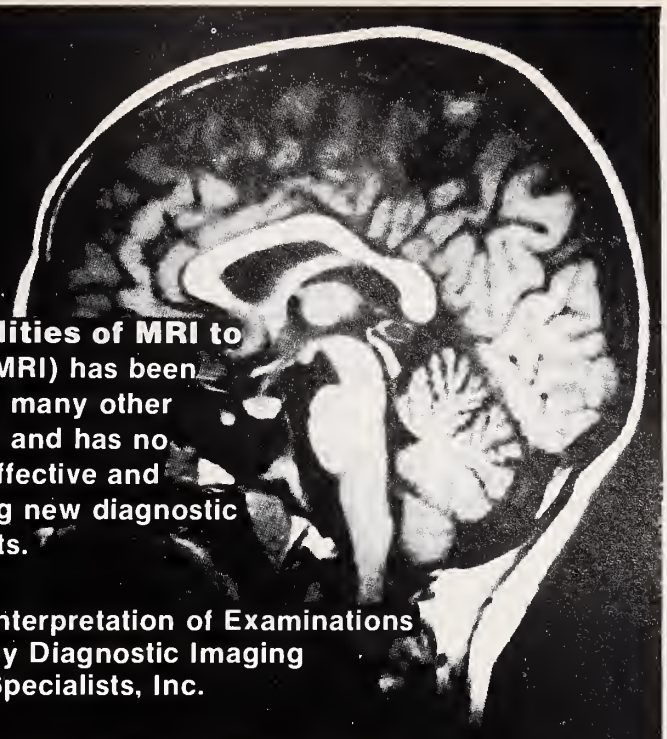
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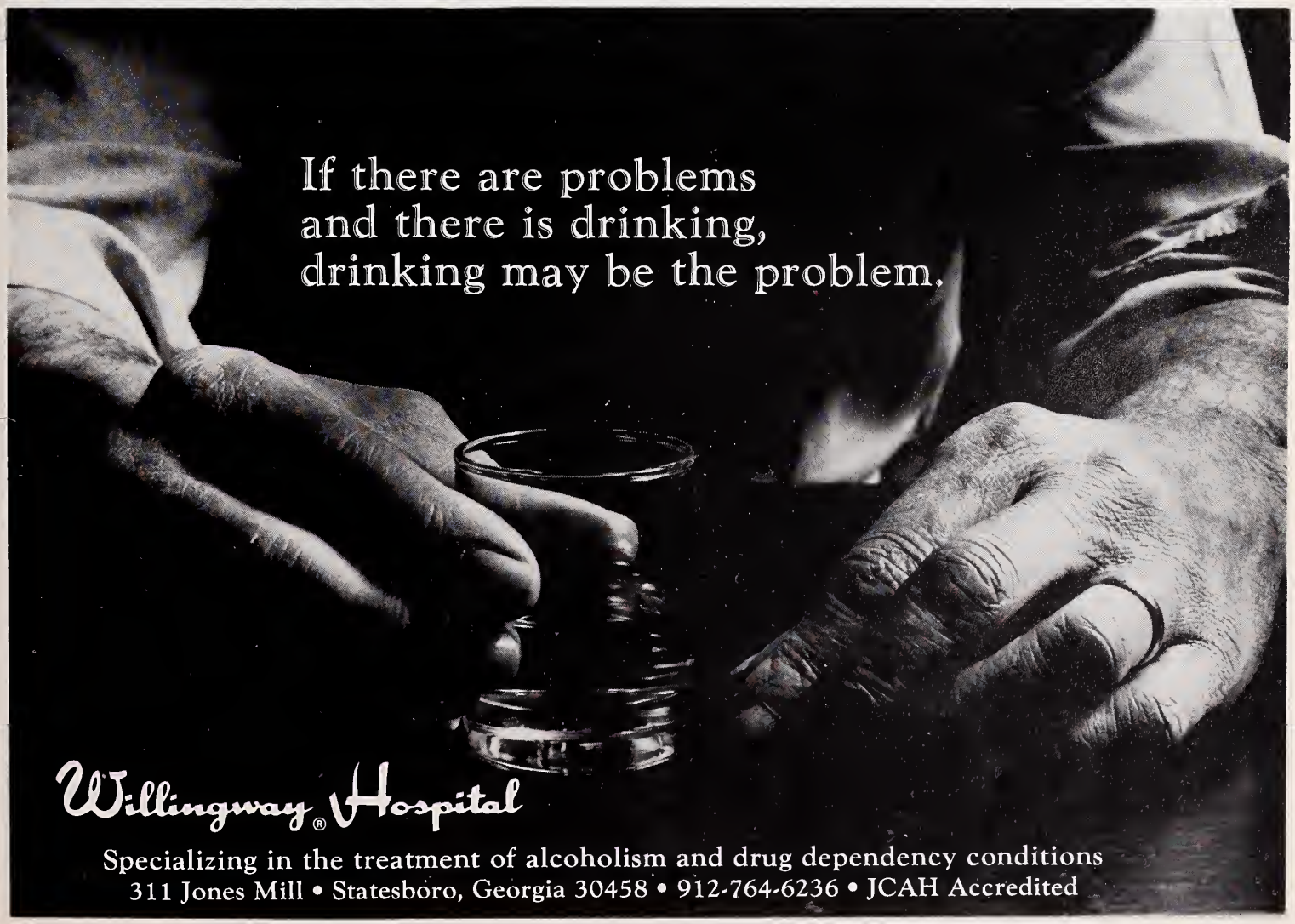
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AN ANALYSIS OF TWO GROUPS OF ALCOHOL AND DRUG PATIENTS

W. FRANK McKEMIE, SR., M.D., RALPH A. HUIE, M.D., CAROLYN A. MARTIN, PH.D.

Data obtained from these two groups of patients admitted to a state treatment facility are discussed and compared.

SHORT-TERM inpatient alcohol and drug treatment services are available to patients in the Northeast Georgia Mental Health/Mental Retardation Consortium at the Georgia Mental Health Institute (GMHI) in Atlanta. The Consortium consists of 17 northeast Georgia counties, of which two are urban, three suburban, and the remainder rural. Patients are referred to the service largely through mental health centers in the counties, and as often as possible, they are returned to these centers for the aftercare vital to their recovery.

The Alcohol and Drug Service uses a multi-disciplinary approach to the care and treatment of its patients, utilizing the individual and integrated skills of physicians, nurses, social workers, chaplains, alcohol and drug counselors, pharmacists, and technicians. As a member of the team, the physician accomplishes detoxification and medical care of the patient.

The objectives of the service are: (1) detoxification of patients who are in withdrawal; (2) evaluation of the physical and biochemical manifestations of chemical dependence; (3) diagnosis and managment of other concurrent physical or psychiatric disease; (4) education of patients about the disease of chemical dependence; (5) orientation of patients to the use of group meetings in dealing with emotions and life problems; and (6) implementation of an aftercare program whose main features are community mental health center affiliation, Antabuse therapy, Alcoholics Anonymous involvement, and development of an individual spiritual program in whatever sense and to whatever degree patients are able to do so.

Two years ago we looked at data collected on 100 patients who had been consecutively admitted to the Alcohol and Drug Unit during the month of April, 1983.[1] Data were collected in 18 categories which indicate characteristics of the patients we serve, evidence of the severity of their disease, evidence of the psycho-social factors present in addictive disease and its progressive nature, and prognosis. Data in the same categories were also collected for the 132 consecutive admissions in April of 1985. The two groups are characterized in the present article. Our clinical impressions suggested we would find changes in substances abused and in certain salient characteristics of the population, while the area served, the physical facilities, the professional staff, and the methods of treatment remained essentially the same.

Dr. McKemie is with the Alcohol and Drug Unit, Georgia Mental Health Institute, (GMHI), Atlanta; Dr. Huie is Director of Medical Support Services, GMHI; and Dr. Martin is a Counseling and Consulting Psychologist, East Point, GA. Send reprint requests to Dr. McKemie, 1256 Briarcliff Rd., Atlanta, GA 30306.

Method

All patients had an evaluation in the Admissions Section of Georgia Mental Health Institute; it consisted of a history and physical examination. On the Alcohol and Drug Unit, each patient had a complete blood count, urinalysis, serology, an SMA-

22 (biochemical profile), skin test for tuberculosis, and/or chest x-ray. Charts were reviewed to obtain data recorded from these procedures and from the patient, family, or protocol on an ongoing basis as treatment and evaluation continued.

Results

The admission of 132 patients in 1985 as compared to the 100 admissions over the same period in 1983 indicates that the census of patients being served by GMHI has increased. Patient census continued consistently higher throughout 1985 than it had been 2 years previously.

Eight-three of the 100 patients admitted in 1983 were white (63 males and 20 females), and 17 were nonwhite (15 males and 2 females). In 1985 a total of 94 of the 132 patients (71%) were white, with 75 (57%) males and 19 (14%) females. There were 38 (29%) patients who were nonwhite, 29 (22%) of whom were male and 9 (7%) female (Table 1).

At admission, only 22 of the 1983 group were married; 54 were divorced or separated, 3 were widowed, and 21 were single. In 1985, 21 (16%) patients were married; 72 (55%) were divorced or separated; and 38 (29%) were singled. Marital data on one patient was missing (Table 1).

Table 1 — April 1983 and April 1985 Consecutive Admissions to GMHI Alcohol and Drug Service, by Race, Sex, and Marital Status

	April 1983 (N = 100)		*April 1985 (N = 132)*	
	Number	*Percent*	*Number*	*Percent*
Race and Sex:				
White	83	83	94	71
Male	63	63	75	57
Female	17	17	19	14
Nonwhite	17	17	38	28
Male	15	15	29	22
Female	2	2	9	7
Marital Status:				
Married	22	22	21	16
Divorced/separated	54	54	72	54
Widowed	3	3	0	0
Single	21	21	38	29
Missing cases	0	0	1	1

Table 2 — April 1983 and April 1985 GMHI Alcohol and Drug Service Admissions by Age

	April 1983 (N = 100)		*April 1985 (N = 132)*	
*Age Range**	*Number*	*Percent*	*Number*	*Percent*
10-20	2	2	2	2
21-30	24	24	34	26
31-40	18	18	51	38
41-50	35	35	23	17
52-60	17	17	14	11
61-70	3	3	7	5
Over 70	1	1	1	1

*Mean age 1983 group = 41 years; mean age 1985 group = 37.5 years.

"Outpatient programs in local mental health centers provide the bulk of treatment for chemical dependence in the state health system."

The age of patients ranged from 18 to 75 years, with the greater concentration for both groups being between ages of 20 and 50. Seventy-seven of the first group and 108 of the second group were in this expanded age category (Table 2), which potentially represents the period of greatest productivity in an individual's life.

In the 1983 group, the age concentration was bimodal, with 24% being in the 20-30 age category and 35% in the 40-50 category. The mean age was 41 years for the total group. In 1985, the largest age concentration occurred in the 30-40 group, comprising 38% of the population; and the next largest was found in the 20-30 group with 26%. The overall mean age was 37.5 years.

Analysis of employment status showed that in 1983, a total of 24 patients were employed and 76 were unemployed, for whatever reason. Data for 1985 showed that 36 (27%) patients were employed, 89 (67%) were unemployed, and 7 (6%) were retired on disability. Excluding retired persons, the 1985 rate of unemployment was 9% less than the 1983 rate. The types of jobs held were not recorded.

Admission status for the two groups was similar. Fifty-six of the 1983 group and 62 (47%) of the 1985 group were first admissions to GMHI. In 1983, there were 77 voluntary admissions, and in 1985 there were 85. Those admitted involuntarily came by affidavit, court order, or physician's certificate of need for hospitalization. Referrals came from local mental health centers for 63 patients in 1983 and for 90 (68%) in 1985, with 10% to 13% of the two groups, respectively, coming from DeKalb General Hospital Emergency Room and 19%

Table 3 — April 1983 and April 1985 GMHI Alcohol and Drug Service Admissions by Substance Used

Substance Used	April 1983 (N = 100) Number	Percent	April 1985 (N = 132) Number	Percent
Alcohol only	63	63	79	59
Alcohol and drugs	27*	27	39	30‡
Drugs only	10†	10	14	11‡

*Includes 1 cocaine user.
†Opiates only.
‡38 cocaine users, 22 (16%) of whom have primary dependence.

Table 4 — April 1983 and April 1985 GMHI Alcohol and Drug Service Patient Follow-Up Status by Contact with Local Mental Health Center

Follow-up Status	April 1983 (N = 100) Number	Percent	April 1985 (N = 132) Number	Percent
Contact	20	20	36	27.2
No contact	61	61	69	52.3
Unknown	29	29	26	19.7
Deceased	0	0	1	.8

of each group from the Veterans Administration and other referral sources. (Eight cases were missing for the 1983 group.)

In 1983, alcohol dependence was the primary diagnosis in 63 patients; drug dependence with single or multiple agents in 10 patients; and mixed dependence, with the use of both alcohol and other drugs, in 27. In 1985, alcohol dependence was the primary diagnosis in 79 (59%) patients, drug dependence in 14 (11%), and mixed dependence in 39 (30%) (Table 3). Only 1 patient in the 1983 mixed group reported cocaine as a drug of choice. However, 38 (29%) in the 1985 mixed or drugs only group listed it as one of their drugs of choice, and cocaine dependence was the primary diagnosis for 22 (16%) of them.

A detoxification routine was administered to alleviate withdrawal symptoms or to diminish the likelihood of complications, and usually consisted of a phenobarbital schedule lasting from 5 to 7 days. Augmentation of this schedule occurred when indicated. Eighty-seven patients required detoxification in 1983 and 105 (80%) in 1985.

Evidence of liver damage was present in 67 of the 1983 patients (with 5 missing cases) and in 97 (73%) of the 1985 patients (with 1 missing case). Other medical and psychiatric conditions were present in 56 patients in 1983 and in 91 in 1985. Some of the psychiatric diagnoses, however, were reported from previous hospitalizations and recorded in the chart without current confirmation.

Outpatient programs in local mental health centers provide the bulk of treatment for chemical dependence in the state health system. Patients are referred to GMHI only if there is either an apparent need for detoxification or there are complications. Consequently, GMHI patients, after a short hospital stay, are referred to local mental health centers for their aftercare programs. For the 1985 group of the current study, the average time spent in the hospital was 8.4 days; length of stay was unknown for the 1983 group. Patients who established contact with a local health center at least once in the month following discharge were arbitrarily given credit for 30 days sobriety. Only 20 of the 1983 group are known to have made contact. Information was not available on 29 patients. Of the 1985 group, 36 individuals (27% of the total) made the contact and was considered sober for 30 days (Table 4).

Conclusions

Admissions to this treatment facility are increasing, with 44% to 48% of the cases being readmissions. Although the majority of the patients are alcoholics, the number of people who present for treatment and who are addicted to other drugs (with or without alcohol) is increasing. Cocaine dependence has greatly increased in this population, as elsewhere, although the increase may have taken place somewhat later in this group than reported nationally.[2] Patients are reaching treatment at an earlier age, indicating perhaps that either the disease is progressing more rapidly with multiple substance abuse or that sufferers of chemical dependence are being identified more readily than previously. Liver damage and other medical and psychiatric disorders have increased in the population. And finally, for whatever reason, few of the GMHI patients follow up their hospitalization with the prescribed aftercare program at local mental health centers. This is suggestive of a poor prognosis for continual remission of chemical dependence in this population and needs to be further examined in evaluating the overall alcohol and drug treatment program of the state and counties.

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BRONCHOPULMONARY DYSPLASIA: FOLLOW-UP CARE

KENNETH C. HENDERSON, M.D., CHEN K. HO, M.D., KATHY B. EILERS, M.D., FRANK P. BOWYER, M.D., MARCIA B. GUZZARDO, M.D., J. STUART LEVI, M.D., OSCAR P. SPIVEY, M.D.

As we provide care for smaller and smaller infants in the intensive care nurseries across the state, an end product of our success is the increasing number of small infants with chronic lung disease. Bronchopulmonary dysplasia (BPD) may soon replace cystic fibrosis as the most common chronic lung disease of children. This reflects the increasing number of newborns that survive with the aid of oxygen supplementation and mechanical ventilation. Local practitioners will provide most of the follow-up care these infants will require. This paper represents our effort to help these physicians as they extend the credibility of our neonatal intensive care units. They constitute an essential component of the state regionalized neonatal intensive care system.

Bronchopulmonary dysplasia is clinically characterized by hypoxemia, dyspnea, and tachypnea. Initially, the characteristic chest x-ray shows areas of atelectasis and emphysema. Later, areas of fibrosis and scarring become apparent. Pathologic examination of the lungs reveals emphysematous areas alternating with atelectasis. There is bronchiolar mucosal hyperplasia, peribronchial smooth-muscle hypertrophy, and interstitial fibroblast proliferation.[1] Lymph vessels are dilated and interstitial edema may be present.

The degree of prematurity and the duration of positive pressure ventilation appear to be the most important risk factors for the development of BPD. Oxygen, pressure, and the length of time on assisted ventilation seem to be additive in injuring the premature lung.[2] BPD is responsible for the extended hospitalization of 10% to 20% of all neonates who survive with the support of mechanical ventilation.[3,4] While we should assess all high-risk infants for signs of BPD, those ventilator dependent for more than 10 days or receiving oxygen for more than 24 hours are particularly suspect.

"Bronchopulmonary dysplasia (BPD) may soon replace cystic fibrosis as the most common chronic lung disease of children."

We will review the hospital treatment of BPD to provide a basis for understanding the recommendations for follow-up care. Adequate oxygenation is the most critical feature in the management of infants with BPD. It is the only therapy effective in preventing and treating cor pulmonale. We diagnose and follow the course of cor pulmonale by echocardiography. Pharmacologic intervention for this serious complication has been disappointing. Some have used digitalis to treat the congestive failure associated with cor pulmonale, but the effectiveness is controversial at best.

It has been well demonstrated that providing adequate oxygenation improved weight gain in infants with BPD.[5] This improved nutritional status results from the decreased work of breathing and overall caloric expenditure. Adequate nutrition itself is also critical. Higher basal metabolic rates have been documented in infants who develop BPD. We believe these infants will benefit from receiving 24 calorie/oz premature formula as long as they require oxygen supplementation. Growth retardation may occur in infants with BPD in much the same way it does in infants with cyanotic cogenital heart disease if both adequate oxygen and calories are not provided.

This paper represents a joint effort by the Mercer University and the Medical Center Pediatric Staff.

Send reprint requests to Dr. Henderson, Medical Director, Medical Center of Central Georgia, 777 Hemlock St., P.O. Box 6000, Macon, GA 31208.

The findings of edema in mucosal walls as well as the interstitium and dilated lymph vessels justify the trial of diuretics in infants with BPD. Furosemide has been the most widely used agent. In a dosage of 1 mgm/kg, it has been shown to improve airway conductance and dynamic pulmonary compliance in these infants.[6] Side effects can develop with the use of loop diuretics: loss of calcium in the urine that may contribute to the development of rickets and loss of potassium and magnesium which can have other insidious effects.

Bronchodilator therapy is in widespread use. Bronchiolar smooth muscle swelling and hypertrophy are major histologic features in the lungs of infants with Respiratory Distress Syndrome (RDS) who are treated with mechanical ventilation and high-inspired oxygen concentration.[7] The increased airway resistance, a hallmark of both RDS and BPD, may respond to bronchodilators, indicating an element of airway hyperreactivity. Rooklin et al[8] showed airway resistance decreased as much as 50% in patients treated with aminophylline. Other recognized benefits of aminophylline therapy include a positive central affect on respiration and improved contractility of the muscle of the diaphragm. These latter affects decrease apnea and the periodic breathing seen in patients with BPD.

"The degree of prematurity and the duration of positive pressure ventilation appear to be the most important risk factors for the development of BPD."

Corticosteroid therapy has been reported beneficial in improving pulmonary function in two randomized, controlled, prospective studies.[9, 10] Selected infants showing no progress in weaning from assisted ventilation may be tried on steroid therapy. If they show no signs of patent ductus arteriosus, congenital heart disease, sepsis or pneumonia, dexamethosone, at an arbitrary dosage of 0.5 mg/kg per day, may be used for 1 week and then tapered over 2 weeks. Multiple hypotheses have been suggested, but the mode of action of dexamethasone in acutely improving pulmonary function is unknown.

There is no question that home care to oxygen-dependent BPD patients results in great financial savings.[11, 12] We recommend home care where circumstances permit. Patients with severe BPD are discharged on cardiopulmonary monitors. Oxygen therapy should be adequate to maintain the arterial partial pressure of oxygen (Pa02) greater than 55 mm Hg to reduce the chances of cor pulmonale.[13] Perhaps a slightly higher Pa02 is desirable in awake babies as they may tend to hypoventilate when asleep, much as do patients with cystic fibrosis. We feel that this level of oxygenation is also necessary to optimize growth and development.

Human milk may not always be the best source of nutrition for infants with BPD in view of their increased needs for calcium, phosphorus, and extra calories. This is especially true for infants on furosemide. For this reason, we recommend alternate day, low-dose furosemide therapy and 24 calorie premature formula for BPD patients while requiring oxygen supplementation.

Infants with BPD may have a family history for reactive airway disease.[14] Since patients with BPD are likely to have hyperreactive airways, smoking in the home and other environmental pollution must be considered. Prolonged theophylline therapy may help, especially in that apnea and periodic breathing have been related to increased risk of sudden infant death syndrome (SIDS).[15]

Benefits of corticosteriod therapy have been shown in ventilator-dependent BPD patients. To our knowledge no studies have been done on non-ventilator dependent infants. There may be a place for a trial of steriods in oxygen dependent BPD patients on an out-patient basis to wean them from oxygen supplementation.

Follow-up care providers must be cognizant of the vulnerability of these infants to respiratory infections. Bacterial disease must be treated promptly. While we have no personal experience with aerosolized ribavirin treatment of infants with BPD, this synthetic nucleoside shows promise in treating infants at risk for severe respiratory syncytial viral infections.[16] Outpatient therapy for these infants may be possible in the future with the development of new aerosol delivery systems.

"Growth retardation may occur in infants with BPD . . . if both adequate oxygen and calories are not provided."

BPD becomes established in susceptible small premature infants in the first several days of life on mechanical ventilation. Our understanding of the pathophysiology BPD may be increased by the study of relevant primate models to further our ability to care for patients.[17, 18] We are especially challenged to serve these infants by preventing the full blown manifestation of chronic lung disease. A description of the measures we use to reduce the incidence of BPD is beyond the scope of this paper. In spite of our best efforts in this regard, many patients with severe BPD die in the intensive care nursery. Survivors are vulnerable to infections and require prolonged medical care and attention. They often have growth and development problems. A few are at risk for developing chronic cor pulmonale. However, those that survive several years can expect to have normal or nearly normal pulmonary function. The reserve growth capacity that allows for the dramatic increase in lung size as children grow may explain this observation.

The system is dependent on the primary care practitioners in the state of Georgia to provide the follow-up care that allows the favorable outcome.

We would like to recognize and to thank in a special way those physicians who accept the challenge.

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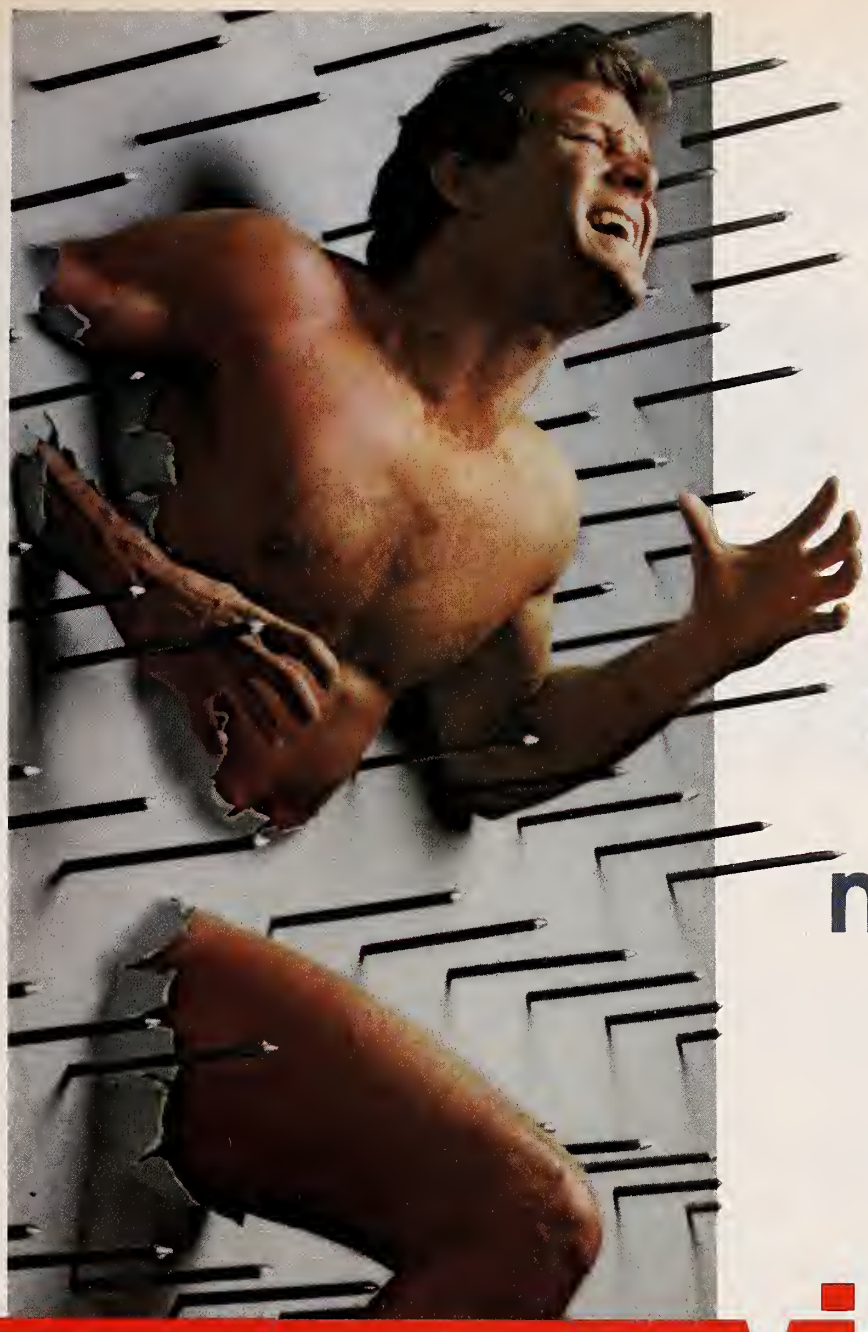
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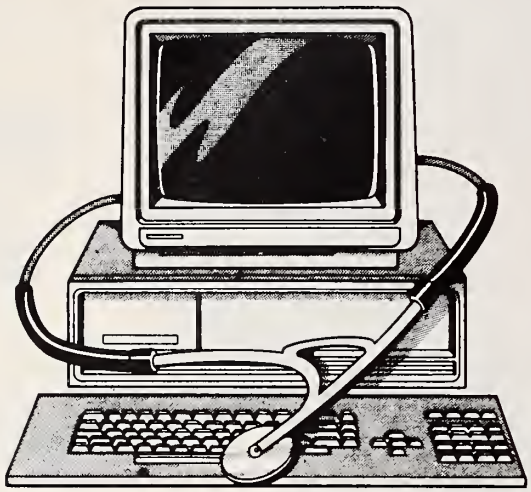
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LOCUM TENENS

CARMEN RENALDY, MARK JENKINS

Temporary assignments provide many benefits and options for physicians.

"HAVE STETHOSCOPE, will travel," is the slogan of Marion A. Baldwin, M.D., a third generation physician from south Georgia. He is one of many physicians in Georgia and nationwide who have been passing over the traditional practice setting in favor of locum tenens (temporary assignments for physicians).

Locum tenens physicians work short-term contracts which range from 1 week to 1 year in different settings including physician offices, hospitals, clinics, emergency rooms, etc. They fill vacancies for: practices which are unattended because of illness, death, vacation, or continuing medical education; hospitals or clinics which want to try a new service without committing to a permanent physician contract; hospitals or other practice settings which have staffing shortages during peak loads.

Locum tenens assignments appeal to a variety of physicians. They range from the resident who is undecided about his permanent career plans, to the middle aged physician who wants to make a lifestyle or career change, to the older physician who wants to alleviate the day-to-day hassles of managing a practice.

"My stethoscope is my overhead," said Dr. Baldwin, a family practitioner who is typical of the retirement age physician who works locum tenens assignments. He had been in private practice in Thomasville for almost 30 years when he decided to leave it.

"By the time I left private practice, it was impossible to keep up with all those forms, taxes, worries, etc.," he said. Locum tenens assignments give him the freedom from modern medical overhead while letting him continue to practice medicine.

"Physicians can experience a complete range of practice styles through locum tenens without the hassles of managing or financing a practice."

Dr. Baldwin has been working for Locum Tenens, Inc., a division of Jackson & Coker, for a year and a half. Last year he worked approximately 30 weeks.

Locum Tenens, Inc., had requests for approximately 100 locum tenens physicians to provide coverage in Georgia in 1985. The requests came from both rural and metropolitan communities. The average contract length was for 4 months, but requests ranged from 1 week to cover for a physician who was on vacation to 8 months for a physician on extended medical disability leave.

Dr. Terri M. Byrd, a 1979 graduate of the Medical College of Georgia, is also working as a locum tenens physician. Shortly after completing her internal medicine residency at Memorial Medical Center in Savannah, her husband was transferred with the Air Force to Spokane, Wash. Unable to find the right position for her in Spokane, Dr. Byrd chose to work as a locum tenens physician.

"My husband (an OB/GYN) and I want to come back to Georgia when he gets out of the Air Force. By working as a locum tenens, I can maintain professional contacts in Georgia."

Locum Tenens: Professional Choice of Many Physicians Today

In the past, locum tenens were often thought to be physicians who "were unable to get other jobs." But this is untrue today. Locum tenens is the professional choice of many physicians today because of the many advantages they offer.

In 30% of the cases at Locum Tenens, Inc., physicians are looking for permanent positions and enjoy the benefit of being able to try out a potential permanent situation on a short-term basis before permanently committing to it. Dr. Jim Davis did exactly that before relocating to Savannah as an emergency room physician at Candler Memorial Hospital. After 20 years in private practice in Newnan, Ga., he was tired of the business hassles of private practice. "I was looking for a new position with my eyes wide open," said Dr. Davis. After 2 months as a locum tenen at Candler, he knew he had found the right job and accepted the position on a permanent basis.

Other advantages of working as a locum tenens physician include:

- Physicians can experience a complete range of practice styles.
- Locum tenens physicians enjoy the adventure of living in different parts of the country.
- The hassles of managing or financing a practice are eliminated.
- Young physicians have the chance to build up experience, enhancing their marketability.
- Locum tenens physicians receive good salaries and benefits including paid housing, paid travel, and malpractice insurance.

Continuity of Care Without Loss of Revenues

There are numerous advantages for the hiring physician or hospital as well. One of the most important is locum tenens provide continuity of high quality care while reducing potential loss of revenues.

Dr. J. Michael Hosford, a pediatrician in Gainesville, Ga., used a locum tenens physician in his solo practice while he was on a 2-week vacation last year. "I was able to get completely out of town for the first time." He said that the locum tenens pediatrician did a very good job. In fact, Dr. Hosford has requested another locum tenens while attending an upcoming week-long conference.

Like other physicians, Dr. Hosford previously had to arrange his own coverage while on vacation. In those cases, coverage is usually limited to emergency situations. And the "borrowed coverage" had to be paid back to the medical colleague in the future. Locum tenens eliminates these problems by providing complete office care in addition to keeping revenues in the office and keeping the office staff productive.

Pamela C. Richards, vice president of professional services at Hutchenson Medical Center in Ft. Oglethorpe, Ga., used locum tenens to cover an unattended pediatric practice for several months until the permanent physician could relocate to the community. "The locum tenens worked out well because of the quality of the physicians," she said. One physician worked as a locum tenen after completing his assignment at the Centers for Disease Control in Atlanta until his permanent position became available in New Jersey. Another locum tenens physician wanted to relocate to the Atlanta area, and the assignment at Hutchenson provided an opportunity to work near Atlanta and to begin looking for a permanent practice to join — which he has since done.

Although the two locum tenens physicians at Hutchenson Medical Center had different reasons for working as locum tenens, both enjoyed the benefits which these assignments offer. And they are among the increasing number of physicians who are choosing to work locum tenens for an interval period of time or as a new "permanent" practice style.

Mr. Renaldy is Staffing Consultant/Southeast, Locum Tenens, Inc., and Mr. Jenkins is Marketing Consultant/Southeast, Locum Tenens, Inc., a division of Jackson & Coker, which is a physician search firm. Send reprint requests to Mr. Jenkins at 400 Perimeter Center Terrace, Ste. 760, Atlanta, GA 30346.

Clinical Applications of Doppler Echocardiography

Charles M. Gross, M.D.

Introduction

In 1842, the Austrian physicist Christian Johann Doppler (1803-1853) called attention to the fact that the color of starlight varied as the star moved toward or away from the terrestrial observation point. If the star were moving away from earth, the wavelength of the observed light was elongated and the color shifted toward the red end of the spectrum; if movement were toward earth, the wavelength was compressed and a shift toward blue resulted. This change in wavelength — and also in frequency, since the two are inversely proportional — which occurs when an energy source and a receiver are moving relative to each other is termed the "Doppler frequency shift" or simply the "Doppler shift."

Fundamentals of Doppler Echocardiography

Doppler echocardiography makes use of the shift in the frequency of reflected ultrasound in order to measure the velocity of intracardiac blood flow. In Doppler echocardiography, a beam or pulse of ultrasound is transmitted into the heart from a transducer hand-held on the chest wall. The ultrasound energy is reflected from the cellular elements in the moving blood and returned to the transducer which detects the returning signal. The frequency of the returning signal is Doppler shifted in direct proportion to the velocity of the blood stream from which it was reflected, with the magnitude of the shift given by the equation

$$f_d = 2\, f_o \, \frac{v \cos \Theta}{c}$$

where f_d = Doppler shift frequency, f_o = frequency of transmitted ultrasound signal, v = velocity of blood flow, Θ = angle of incidence between ultrasound beam and blood flow velocity vector, and c = constant velocity of ultrasound in tissue (~ 1560 m/s). Rearrangement of the equation allows it to be solved for v, and the velocity of intracardiac blood flow can thus be very accurately measured.

In addition, the direction of the intracardiac blood flow velocity vector toward or away from the transducer can be determined by comparing the frequency of the returning signal to the transmitted frequency to see if it is higher or lower. If higher (wavelength shorter), the direction of blood flow is toward the transducer; if lower (wavelength longer), blood flow is directed away from the transducer.

"Three different modalities of Doppler echocardiography are in clinical use: pulsed wave Doppler, continuous wave Doppler, and the new Doppler color flow mapping."

Dr. Gross is Associate Professor of Medicine, Section of Cardiology, and Director, Echocardiogrpahy Laboratories, Medical College of Georgia and Veterans Administration Medical Center, Augusta, GA 30912. Send reprint requests to him.

This paper is sponsored by the Georgia Affiliate of the American Heart Association.

Types of Doppler Echocardiography

Three different modalities of Doppler echocardiography are in clinical use: pulsed wave Doppler, continuous wave Doppler, and the new Doppler color flow mapping. It must be clearly understood that the basic Doppler shift principle is fundamental to all three technologies and that they differ only in the manner in which they acquire and display blood flow velocity information.

Pulsed or range-gated Doppler employs a time gating mechanism to record velocity information from a small sample volume whose distance from the transducer is known by virtue of the constant speed of ultrasound in tissue. When the sample volume cursor is overlaid on a simultaneous real-time two-dimensional sector image, the pulsed Doppler sample volume can be guided to a precise point within the heart providing blood flow velocity information from that particular location. The disadvantage of pulsed Doppler is that there is an upper limit upon the unambiguous determination of blood flow velocities. Continuous wave Doppler, which is not subject to this constraint, can measure high blood flow velocities. This is achieved, however, at the expense of range-gating because continuous wave Doppler measures blood flow velocities along the entire length of the ultrasound beam, although localization of high velocity jets within the heart can be achieved by the experienced operator. A continuous wave Doppler study may employ a separate non-imaging transducer or may be combined with simultaneous real-time imaging for purposes of orientation of the Doppler beam.

The newest Doppler modality is color flow mapping. In this technology, a color-encoded map of blood velocity information is superimposed upon a real-time two-dimensional sector image. This comes close to being a true "noninvasive angiogram."

Clinical Applications

Mitral, Aortic, and Pulmonic Valves

Mitral and aortic valve lesions are particularly amenable to evaluation by Doppler echocardiography. Mitral stenosis can be easily quantitated and valve area calculated from Doppler recordings correlates quite well with that obtained by two-dimensional echocardiogrpahy or from cardiac catheterization data. Mitral regurgitation can be assessed by Doppler echocardiography in a semiquantitative fashion by mapping the extension of the regurgitant jet into the left atrium using pulsed Doppler. Aortic regurgitation is assessed in a similar fashion except that mapping is carried out in the left ventricle.

Doppler echocardiography has been of considerable assistance in resolving a number of very common clinical problems, for example the middle-aged to elderly patient with a basal systolic ejection murmur. It is frequently difficult on physical examination to be certain whether hemodynamically significant aortic stenosis is present. Continuous wave Doppler echocardiography can readily resolve this issue by allowing measurement of blood flow velocity across the abnormal aortic valve. Stenotic valves produce an increase in transvalvular blood flow velocity, and the gradient across the valve can be easily calculated from this velocity measurement. The aortic valve area may also be calculated from Doppler-derived data. In this fashion, aortosclerosis may be separated from hemodynamically significant aortic stenosis, and patients can be easily screened without subjecting them to the hazards of cardiac catheterization. The same Doppler technique allows calculation of the gradient across the pulmonic valve and identification of patients with significant pulmonic stenosis as opposed to those without valvular obstruction whose ejection murmurs are innocent or functional.

Tricuspid Valve

Tricuspid regurgitation is a common concomitant of a variety of acquired cardiac diseases. Echocardiography can address this diagnosis by the use of an echo contrast agent (e.g., agitated saline) injected intravenously during the real-time two-dimensional examination. However, Doppler echocardiography has proved to be a much more sensitive and specific method of making the diagnosis and is now the noninvasive technique of choice for the detection and quantitation of tricuspid regurgitation.

Prosthetic Valves

Though it is clear that echocardiography provides a premier method for the noninvasive evaluation of patients with disease of native valves, prosthetic heart valves, by now ubiquitous, have been somewhat less amenable to noninvasive evaluation. Though some laboratories have achieved success using echophonocardiography, this method requires meticulous technique and has not been widely utilized. Doppler echocardiography has now proven itself capable of filling this gap in our diagnostic repertoire.

The same basic considerations regarding the application of Doppler echocardiography to native valve

lesions pertain also to the evaluation of prosthetic valves, although modifications in technique are obviously required. Normal values for a variety of prosthetic valves are available in the medical literature or from the manufacturer of the particular prosthesis, and the result obtained in a given patient can usually be compared to these reference values in order to determine if malfunction is present. It is advisable, however, to establish baseline values for each individual patient by performing a Doppler echocardiographic study shortly after valve replacement surgery so that the patient can serve as his or her own control should the question of prosthetic valve malfunction arise. Furthermore, by making a baseline Doppler echo standard practice in all patients following valve replacement, individuals with patient-prosthesis mismatch due, for example, to a small aortic annulus can be identified so that they will not subsequently be incorrectly labelled as having prosthetic valve malfunction. Similarly, the baseline presence of normal prosthetic valve closure and/or leakage backflow may be identified so that this will not later be incorrectly interpreted as trans- or paravalvular regurgitation.

Given that a baseline Doppler study should be obtained in all prosthetic valve patients, the question remains how often the study should routinely be repeated. We would recommend that further follow-up Doppler studies in patients with mechanical valves are warranted whenever prosthetic valve malfunction is suspected. Bioprosthetic valves, however, must be regarded differently, since it has become abundantly clear that many if not most of these valves will eventually degenerate, with the time course of the degeneration being quite variable. Thus we feel that patients with bioprosthetic valves are at particular risk of valve malfunction and should probably have echocardiographic examinations yearly, with Doppler studies added when valve deterioration is first detected. The interval between the serial studies should then decrease appropriately as valve degeneration progresses. The information obtained from these sequential studies, in conjunction with the history, physical examination, and other laboratory data, should allow for the development of a rational plan for elective valve replacement.

"Real-time two-dimensional Doppler echocardiographic flow mapping, wherein a color-encoded map of blood flow velocity information is superimposed upon a real-time sector image, is the latest technologic advance in Doppler echocardiography."

Though this schema should serve as a rough guideline for patients with bioprosthetic valves, we feel that certain subgroups with bioprosthetic valves are at particular risk of valve degeneration and should be followed even more closely. These include children and young adult patients, women who have been pregnant with the bioprosthetic valve in place, patients with chronic renal disease, and other patients with abnormalities of calcium metabolism. In pediatric cardiology, Doppler echocardiography has proved particularly useful in following children in whom a bioprosthetic-valved conduit has been implanted for correction or palliation of complex congenital heart disease.

The foregoing recommendations apply to the routine followup of patients with prosthetic valves. Of course, should any patient present with overt signs or symptoms of prosthetic valve malfunction, an echocardiographic study with Doppler is indicated, assuming that this will not delay urgently needed definitive surgical therapy. Lastly, it should also be borne in mind that since symptoms related to prosthetic valve malfunction are frequently insidious and signs covert, valve malfunction should be suspected — and a Doppler echocardiographic study considered — in any patient with a prosthetic valve presenting with symptoms and signs not otherwise easily explained.

Congenital Heart Disease

Doppler, especially when utilized in conjunction with M-mode and two-dimensional echocardiography, has been a tremendous boon in the evaluation of patients with congenital heart disease. Ventricular septal defects are usually readily detectable by Doppler echocardiography, even without simultaneous two-dimensional imaging. Atrial septal defects, however, may be somewhat more problematic, in part because of the lower blood flow velocity and in part because of the difficulty in distinguishing blood flow across a septal defect from normal superior or inferior vena caval inflow. Patent ductus arteriosus is usually readily identifiable. In addition, the magnitude of atrial, ventricular and ductal shunts (Q_p:Q_s ratio) can usually be determined, although the procedure is a bit tedious and requires meticulous attention to technique. Congenital stenotic and regurgitant valve lesions and coarctation of the aorta can be identified and quantitated as in adult patients.

Cardiac Function

Doppler echocardiography has been utilized to measure cardiac output and thereby obtain information regarding global cardiac performance. This approach is particularly attractive because calculation of left ventricular function utilizing conventional echocardiography is fraught with problems when regional left ventricular wall motion abnormalities are present. Serial Doppler studies of left ventricular function may be used to assess the efficacy of therapeutic interventions, for example vasodilator therapy for congestive heart failure.

Doppler Color Flow Mapping

Real-time two-dimensional Doppler echocardiographic flow mapping, wherein a color-encoded map of blood flow velocity information is superimposed upon a real-time sector image, is the latest technologic advance in Doppler echocardiography. Recent publications and scientific meetings have clearly defined a clinically useful role for this new technique.

Color flow mapping appears at present to have significant utility as a screening tool to be employed in conjunction with the sector scan when regurgitant or shunt lesions are supspected. By so doing, the tedious time-consuming continuous and pulsed wave Doppler examination of each valve can be abbreviated. At present, quantitation of regurgitant lesions is done utilizing pulsed Doppler "mapping" of the geographical extent of the regurgitant jet into the upstream chamber, a technique which is, at best, time-consuming and inexact. There is promise that color flow mapping may make quantitation of the severity of regurgitant lesions into a more exact science.

Color flow mapping may also aid in the quantitation of stenotic lesions by allowing more precise alignment of the continuous wave Doppler beam with the stenotic jet. Since the cosine of θ, the angle of incidence between the Doppler beam and the velocity vector of the stenotic jet, is included in the Doppler equation, it is clear that the more closely θ approaches zero, the closer will be the cosine to 1 and the less error there will be in the Doppler-determined transvalvular velocity from which the gradient is calculated.

"Serial Doppler studies of left ventricular function may be used to assess the efficacy of therapeutic interventions, for example vasodilator therapy for congestive heart failure."

Multivalvular heart disease may also be more conveniently addressed using color flow mapping. For example, it is difficult to detect, let alone map, aortic regurgitation in the presence of mitral stenosis or certain types of mitral valve prostheses. A real-time color flow study in such cases will show two separate jets directed into the left ventricle, one representing forward flow entering via the mitral valve and the other due to regurgitant flow through the aortic valve.

Lastly, color flow mapping is likely to have applications in the further noninvasive evaluation of prosthetic valve function.

Conclusion

Though pulsed Doppler echocardiography first attracted attention in this country approximately 10-12 years ago, widespread interest was not present until the usefulness of continuous wave Doppler became apparent approximately 3-4 years ago. Since that time, there has been a "log phase" of growth in interest and applications regarding all forms of Doppler echocardiography. Color flow mapping appears poised to continue this trend. At the Medical College of Georgia, Doppler echocardiography, as M-mode and two-dimensional echocardiography before it, has become a standard diagnostic technique and an indispensable addition to the armamentarium of noninvasive cardiology.

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Living Will Update

Richard Greene

A 7-YEAR struggle to pass a "Living Will" statute in Georgia was successfully resolved in April, 1984, when Governor Joe Frank Harris signed S.B. 186 into law.[1] This statute helped patients, families, and physicians deal with the difficult problem of whether to "artificially prolong" the life of a terminally ill patient.

This law has been widely acclaimed by Georgians from all walks of life, but especially among our senior citizens. The idea of being artificially prolonged by modern medical technology against their wishes created significant apprehension among that group. Georgia's Living Will statute, though eventually praised by its major legislative opponent as the "best written Living Will statute in the United States," still needed changes. The 1986 Session of the Georgia General Assembly passed two major amendments.[2] These amendments are important for you as physicians to know, because you may be directly involved in the carrying out of a Living Will.

The original statute provided that a person's Living Will was valid for up to 7 years from the date it was signed, unless the person was "incapable of communicating with the attending physician."[3]This time limitation brought considerable negative comment from several senior citizens groups. They were rightly concerned that a person might forget to sign a new Living Will when the 7-year limitation expired. With the help of a resolution passed by the 1985 "Silver Haired Legislature,"[4] an amendment was passed that eliminated the 7-year provision. In order to avoid having tens of thousands of Georgians sign new forms, the legislation also provided that persons can still use their old form and eliminate the 7-year provision by merely striking through and signing or initialing in the area of the appropriate paragraph as shown below:

"3. ~~This will shall have no force or effect seven years from the date I signed this document as stated above; however, I understand that if at the end of said seven years I am incapable of communicating with the attending physician, this will shall remain in effect until such time as I am able to communicate with the physician;~~"

It is not necessary for the "strike through" change to be initialed by anyone other than the patient. New forms with the time limitation removed are now available through the Medical Association of Georgia and the Georgia Hospital Association. If people fail to cross through the 7-year limitation, then their Living Will will be invalid after 7 years from the date they signed it. This applies only to Living Wills signed prior to March 28, 1986, which is the effective date of the new statute. If a patient signed his/her Living Will after March 28, 1986, and mistakenly used an old form containing the 7-year limitation, that provision would be ineffective.[5]

The second major change has the potential of having the greatest impact on the physician. The original act allowed only the *exact* form to be used as a Living Will. That form was set out word by word within the statute.[6] On the surface, this made it easier for the physician to determine if a patient's Living Will was valid by merely confirming the correct form; however, it created more problems than it solved. Theoretically, if one word was wrong, the Living Will was not valid and could not be relied upon for direction. It also made it impossible for the physician to recognize a Living Will that came from another state. The new statute says that the patient's Living Will has to be "substantially" in the form provided in the legislation. This allows for some flexibility but must be reviewed with caution. If a patient composes his/her own version of a Living Will, adds provisions not contemplated by the statute, or uses a form that is *not* substantially the same as provided by law, then the physician should consider seeking legal advice from an attorney before relying on the validity of the document.

Both changes are positive and meaningful improvements in Georgia's Living Will statute. The overall effects are beneficial to patients and physicians alike. Please contact MAG's General Counsel at the headquarters office if you have any questions concerning Living Wills.

Mr. Greene is MAG's General Counsel.

Notes

1. O.C.G.A., Chapter 32, Title 31.
2. House Bill 1352, authored by Rep. Helen Selman (D) Fulton, Act No. 1350, effective March 28, 1986.
3. O.C.G.A. 31-32-3; O.C.G.A. 31-32-6
4. House Bill 1 by Mr. Ray of Columbus, Georgia's Silver Haired Legislature, a mock legislature composed of senior citizens and partially sponsored by the Georgia Department of Human Resources, Office of Aging.
5. O.C.G.A. 31-32-3 (b).
6. O.C.G.A. 31-32-3 (b).

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

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Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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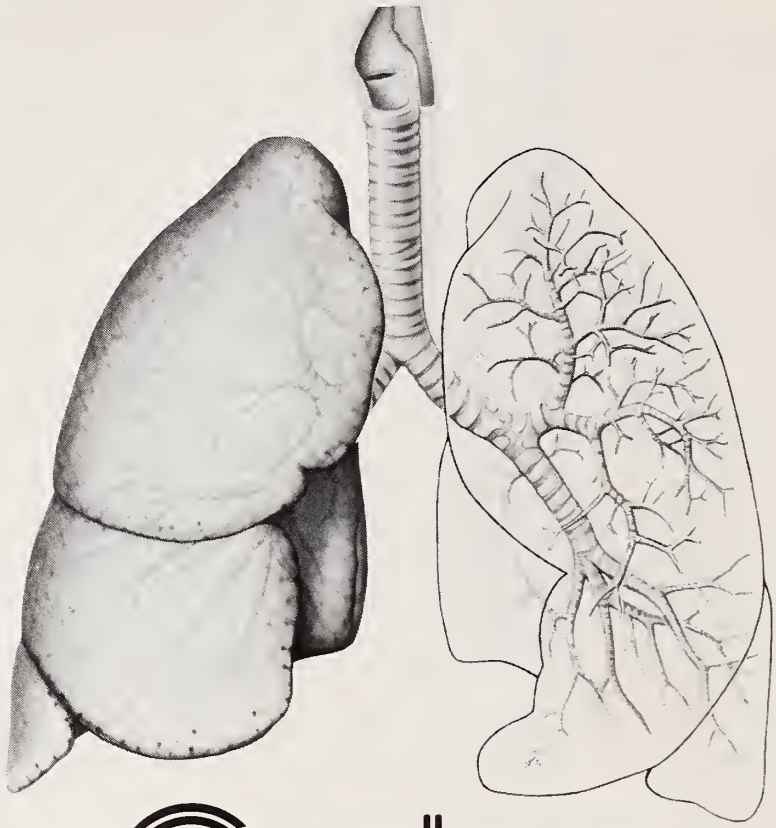
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Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly)

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Intraoperative Radiation Therapy

Arthur B. Kirchner, M.D., R. Roger Sankey, Ph.D.

"IORT has been used to treat gastric, pancreatic, colorectal, bladder, uterine and cervical carcinomas, and certain soft tissue sarcomas arising in the retroperitoneum."

INTRAOPERATIVE RADIATION THERAPY (IORT) is the application of a single large dose of radiation to a malignant tumor during surgical exploration of a patient. The objective of IORT is to improve local tumor control and minimize normal tissue complications. The intraoperative technique allows direct tumor visualization and mechanical exclusion of anterior and lateral normal tissues from the treated volume. The use of a 6 MeV to 16 MeV electron beam protects tissues posterior to the volume due to the limited depth penetration of the electrons. The disadvantage of this treatment is that single large doses to a moderate or large tumor volume are only palliative and must be combined with cytoreductive surgery or external beam radiation to be curative.

Most epithelial tumors of 1 cc or greater require radiation doses of 6000 to 7000 rads to eradicate, depending on their size and histopathology. These doses can be achieved in certain areas of the head and neck where the adjacent normal tissues can tolerate this amount of radiation or in the pelvis where, for example, radioactive sources can be placed inside the uterus. Our ability to give cancerocidal amounts of radiation to intra-abdominal tumors is limited by the tolerance of adjacent radiosensitive normal tissues: stomach and small bowel, 4500 rads; liver, 3000 rads; and kidneys, 2500 rads.

The procedure is a carefully coordinated interdisciplinary team project consisting of an anesthesiologist, surgeon, radiation oncologist, and physicist. This care is heavily supported by a dedicated group of nurses, dosimetrists, and radiation technologists with clinicopathologic correlations performed by diagnostic radiology and pathology.

The surgery begins with a generous incision to insure the adequate exposure of the tumor volume to be treated. A midline transabdominal incision provides complete visualization and access to most pelvic, retroperitoneal and central abdominal tumors. Upper abdominal malignancies may require high transverse or bilateral subcostal approaches with an occasional left thoraco-abdominal incision to expose the stomach or gastric bed.

Providing adequate tumor exposure may be relatively simple or complex. For example, in the retroperitoneum, reflection of the colon, mobilization of the small bowel mesentery and pelvic viscera along with complete disection of the kidney and ureter may be necessary to allow displacement of these radiosensitive structures from the treatment field.

Dr. Kirchner is Medical Director, Department of Radiation Oncology, St. Joseph's Hospital, 5665 Peachtree Dunwoody Rd., Atlanta, GA 30342; Dr. Sankey is Physicist, Department of Radiation Oncology, St. Joseph's Hospital, Atlanta. Send reprint requests to Dr. Kirchner.

This paper is sponsored by the American Cancer Society, Georgia Division.



Figure 1 — The lucite cone is placed over the tumor bed to exclude normal tissue from the electron beam treatment.



Figure 2 — Transport of patient to the linear accelerator by the anesthesia team.

Since no one can be present in the room during the actual radiation exposure time, adequate retraction of normal structures out of the field of the electron beam is essential. Versatile self-retaining retractors are needed to allow various degrees of tension simultaneously from opposite directions at various depths. The Bookwalter retraction device and Thompson retractor system have been the most widely used.[1]

Special lucite cones are necessary in preventing normal tissue from entering the treatment field. These hollow tubes most often are round but may be rectangular or oval in shape. They may be flat on both ends but most often have a beveled edge of 15° to 30° to allow for sloped surfaces. Various diameters ranging from 4 to 10 cm are available to allow precise delineation of the treatment volume. The distal end of the tube is positioned on the tumor bed to be treated, and the proximal end is carefully docked to the head of the linear accelerator. This provides a fixed treatment distance for both accurate and reproducible dosimetry calculations.

In our institution, a hyperthermia suite within the Radiation Oncology Department has been outfitted with overhead surgical lamps and proper airconditioning. The evening prior to surgery all portable equipment and furniture is removed and the floors and walls are carefully scrubbed. Anesthesia and operating room equipment is then assembled. A (surgilift) mat is placed between the patient and the operating table mattress.

The patient is anesthetized, and the tumor is surgically exposed. One of the lucite cones is then placed over the tumor bed (Figure 1), providing a direct unobstructed view of the tumor bed for the electron beam. The surgical wound and lucite cone are draped with multiple layers of sterile linen during transport of the patient to the linear accelerator treatment room. The patient is then lifted off the O.R. table with the surgilift and moved 40 feet through a hall (Figure 2) to the 20 MeV linear accelerator treatment couch. This transfer takes approximately 45 seconds, and the patient is ventilated with an ambou bag until reaching a second anesthesia machine already awaiting the patient in the treatment room. The sterile linen are removed from the lucite applicator which is then rechecked by the surgeon and radiotherapist for tumor volume verification. The lucite cone is docked to the electron cone of the linear accelerator (Figure 3). Areas of normal and/or critical tissue within the field defined by the lucite cone may be shielded from the beam by placing a

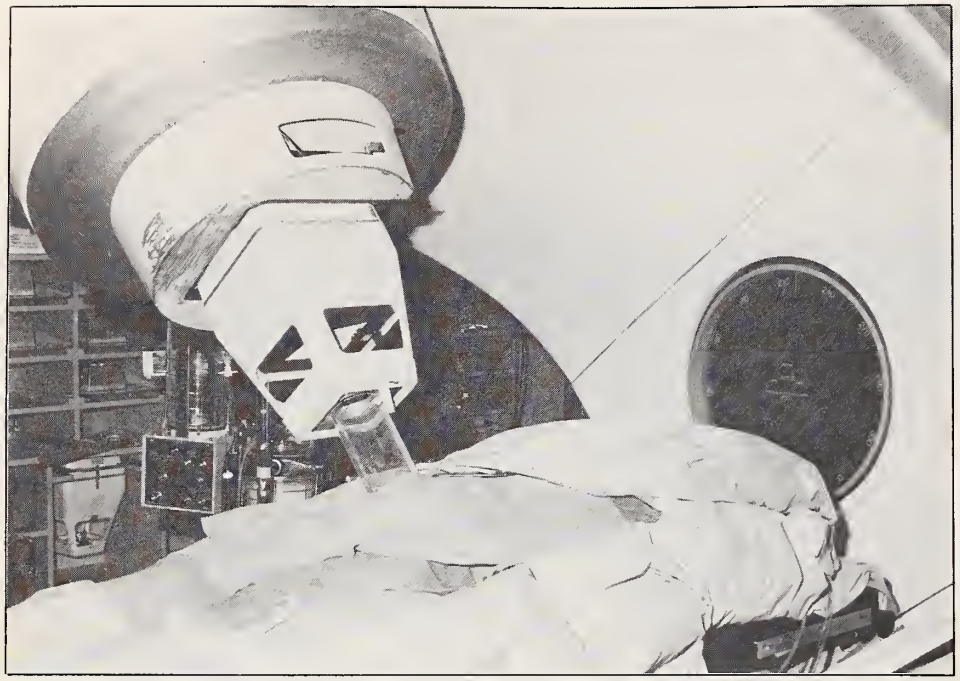


Figure 3 — The lucite cone is docked to the electron applicator of the linear accelerator for treatment. The lead cutout in the base of the applicator excludes normal tissue on the field of the beam.

custom lead cutout in the electron cone. The vital signs are monitored through preset closed circuit video monitors and a stethoscope which is connected to the patient through a plastic tube which traverses a shielded wall. The treatment itself takes approximately 10 minutes. The patient is draped and returned to the operating room where closure of the wound and recovery takes place.

"The intraoperative technique allows direct tumor visualization and mechanical exclusion of anterior and lateral normal tissues from the treated volume."

The hyperthermia suite is cultured extensively before, during, and after the procedure by our infectious disease coordinator. The type and amount of bacterial flora attained from these cultures have not differed from our standard O.R. suites. During the 3 years we have been performing this procedure, there has been only one wound infection.

IORT has been used to treat gastric, pancreatic, colorectal, bladder, uterine and cervical carcinomas, and certain soft tissue sarcomas arising in the retroperitoneum. Most of the clinical data with statistical significance come from the Japanese experience,[2, 3] since their use of IORT long precedes U.S. studies. The majority of IORT in the U.S. has been developed at Howard University,[4] Mayo Clinic, [5, 6] Massachusetts General Hospital,[7] and National Cancer Institute.[8]

Our department is a member of the Radiation Therapy Oncology Group and as such is participating in several national investigational intraoperative protocols. The early results from these studies indicate that IORT has its greatest efficacy (1) in treating residual microscopic disease following gross resection, (2) as adjuvant boost therapy to external beam treatment where normal tissue tolerance limits external dose, and (3) for palliation of pain from large unresectable masses.

IORT is not without complications, as listed in Table 1. Most all of these complications have occurred at doses greater than 2000 rads.

Table 1 — Complications of Intraoperative Radiation Therapy

1. **Ureteral and biliary duct stricture**
2. **Small and large intestine bleeding and ulceration**
3. **Intestinal obstruction**
4. **Peripheral nerve palsies**
5. **Osteo-radionecrosis**

In conclusion, our experience demonstrates that IORT can be performed safely in a community hospital setting. However, until randomized studies with a statistically significant population have been completed demonstrating a clear advantage over conventional techniques, we recommend that its use be limited to institutions which are participating in nationally sanctioned protocols.

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NEW MEMBERS

Barnes, David L., M.A.A. — Act — GS
620 Peachtree St., Atlanta 30365

Basilio, Florida S., Muscogee — Service — PD
3 Pine Needle Ct., Columbus 31907

Beasley, Michael E., Dekalb — I&R — PS
1432 Oakridge Circle, Decatur 30033

Bennett, Gertrude K., M.A.A. — Act — PS
5410 Mount Vernon Pkwy., Atlanta 30327

Blincoe, William A., M.A.A. — Act — CD/IM
105 Collier Rd., Suite 4050, Atlanta 30309

Burk, Linda L., M.A.A. — I&R — PH
1327 Clifton Rd., Atlanta 30322

Campbell, Robert C., Bibb — Student
Mercer Univ. School of Medicine, Box 51, Macon 31207

Capps, Raymond L., Floyd-Polk-Chattooga — Act (N-2)-N
1825 Martha Berry Blvd., Rome 30161

Cook, Arthur J., Jr., M.A.A. — Act (N-1)-IM/CD
1100 Cleveland Ave., East Point 30344

Davis, William G., Clayton-Fayette — Act — GP
210 Highway 54 E, Peachtree City 30269

Delaney, Vera, M.A.A. — Act (N-1)
1365 Clifton Rd., Atlanta 30322

Flowers, Cornelius, DeKalb — Act — IM/CD
1760 Candler Rd., Suite B, Decatur 30032

Greenway-Birsdeye, Michelle L., Bibb — Student
4389 Amy Road, Lithina 30058

Gregory, William J., Whitfield-Murray — Act (N-2)-IM
1007 East Lakeshore Dr., Dalton 30720

Gunkel, Dieter K., Georgia Medical — Act — CD
10 St. Joseph's Professional Plaza, Savannah 31499

Handelman, William N., DeKalb — Act — FP
1935 Cliff Valley Way, Suite 120, Atlanta 30329

Holcombe, Robert H., Jr., DeKalb — I&R — IM
1083 Second Street, Apt. A., Stone Mountain 30083

Jacobs, Louis H., M.A.A. — Act — R
1365 Clifton Rd., Atlanta 30322

Jarrard, William H., Jr., Bibb — I&R
Medical Center of Central Georgia, Box 33, Macon 31208

John D. Kennedy, Cobb — Act — GS
130 Vann St., Suite 220, Marietta 30060

Klopper, Jeffrey H., Cobb — I&R & PTH/N
3188 Atlanta St., Smyrna 30080

Levy, Jerrold, M.A.A. — Act
1365 Clifton Rd., Atlanta 30322

Macheski, William, Muscogee — Act — CD/IM
710 Center St., Columbus 31901

Mathew, Sushila M., Clayton-Fayette — Act — PD/ID
7330 Kendel Court, Jonesboro 30236

Mettler, Kathryn W., M.A.A. — Act — IM
4053 LaVista Rd., Suite 200, Tucker 30084

Moore, James L., Crawford W. Long — Act (N-2)-PS
700 Oglethorpe Ave., Athens 30606

Newton, Nancy E., Clayton-Fayette — Act (N-1)-PTH
P.O. Box 328, Riverdale 30274

Pennick, Willie A., Bibb — I&R
2275 Gray Highway, M-12, Macon 30211

Robertson, Dirk B., M.A.A. — Act — D
1365 Clifton Rd., Atlanta 30322

Schweistris, John E., Georgia Medical — Act
500 East 66th St., Savannah 31405

Sewell, Charles W., M.A.A. — Act
1365 Clifton Rd., Atlanta 30322

Stubbs, David M., Decatur-Seminole — Act — R
P.O. Box 981, Bainbridge 31717

Todd, Norman W., M.A.A. — Act — OTO
1365 Clifton Rd., Atlanta 30322

Tuttle, Elbert, M.A.A. — Act
1365 Clifton Rd., Atlanta 30322

Walter, Paul F., M.A.A. — Act
1365 Clifton Rd., Atlanta 30322

Wiltz, Philip G., M.A.A. — Associate — ORS
75 Piedmont Ave., Atlanta 30303

PERSONALS

First District

Romualdo Laygo, M.D., of Springfield, has moved his general surgery practice to Screven. He moved from Springfield, where he had practiced for 10 years.

Malcolm I. Page, M.D., has been appointed to the American College of Physicians' State Health Policy

Subcommittee and the State Immunization Subcommittee. Dr. Page is professor of medicine at the Medical College of Georgia Hospital and previously served as acting administrator of MCG Hospital.

Fremont P. Wirth, M.D., has been elected president of the Georgia Neurosurgical Society. He has practiced at the Neurological Institute of Savannah since 1974.

Fourth District

Jaquelin S. Gotlieb, M.D., has been named medical director for CIGNA Healthplan of Georgia, Inc. Dr. Gotlieb, a pediatrician, has practiced in Stone Mountain for more than 9 years.

Sixth District

Robert B. Mann, Jr., M.D., has completed all requirements for certification and has been named a Diplomate of the American Board of Urology. Dr. Mann graduated from Emory University Medical School. He completed a surgical internship and a 4-year urologic residency at Emory University Affiliated Hospitals.

Seventh District

Marietta internist **James Fisher, M.D.,** has been appointed by Governor Joe Frank Harris to serve on the Board of the Department of Human Resources. Dr. Fisher is a member of the medical staff executive committee at Kennestone Hospital. Before coming to Marietta, he served as the U.S. Public Health Service's chief medical officer at Plain View Health Center in Rose Hill, North Carolina.

DEATHS

Alvin D. Josephs, M.D.

Alvin D. Josephs, M.D., of Atlanta, a retired American Red Cross and Veterans Administration official, died in May. He was 71. Dr. Josephs was director of the Red Cross' blood program in Atlanta, leaving that post in 1960. Later, he worked at the VA Medical Center until his retirement.

Dr. Josephs graduated from Emory University Medical School. He served in the Army during World War II, and after he was wounded on Guadalcanel, received a Purple Heart. He is survived by his wife and three children.

Hugh Jennings Bickerstaff, M.D.

Hugh Jennings Bickerstaff, M.D., Obstetrician-gynecologist of Columbus, died in June at the age of 83. His 56-year career included clinical, academic, and preventive medicine. He opened his Columbus practice in 1929. In 1977, the Muscogee County Medical Society honored Dr. Bickerstaff by having his portrait painted and displayed in the auditorium of The Medical Center, the first time this honor has been given to a physician while he was living.

Dr. Bickerstaff received his medical degree in 1926 from the University of Pennsylvania School of Medicine. In 1940 and 1941, after receiving a fellowship for graduate study in public health, he earned master's and doctorate degrees in public health from Johns Hopkins University. He was former chief of staff and chief of Ob/Gyn at The Medical Center and St. Francis Hospital and a consultant at Martin Army Community Hospital. He is survived by a son, a sister, and two grandchildren.



Receiving AMA's Awards on behalf of the Auxiliary was Mrs. Dent W. Purcell (Ann), of Savannah, 1985-1986 President of the Auxiliary to MAG.

AUXILIARY

The Auxiliary to the Medical Association of Georgia was honored at the Annual American Medical Association Auxiliary Annual Convention as a 1985-1986 AMA-ERF award winner and membership award winner. Two awards were received by the Auxiliary to MAG from the AMA-ERF: one for having over 75% of county auxiliary participation in AMA-ERF fund raising projects (Ga. had over 82% of county auxiliary participation); and the second award was for having more than a 25% increase in AMA-ERF contributions. (Ga. actually had over 32% increase from last year).

A membership award was also presented to the Auxiliary to Mag for the organization of its newest county auxiliary — Walton County Medical Auxiliary.

QUOTES

It is well, when judging a friend, to remember that he is juding you with the same godlike and superior impartiality.
ARNOLD BENNETT

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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

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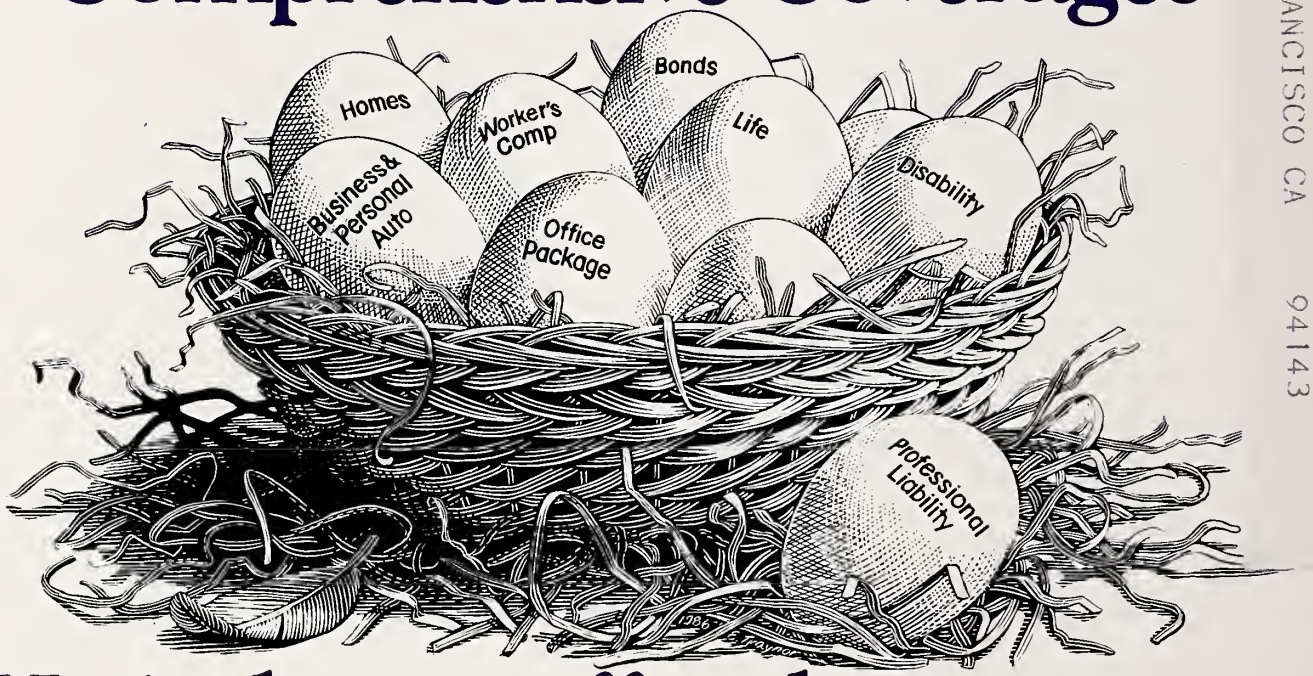
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JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA



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The Hospital, The Attending, The Resident: A TRIAD

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A New Option For Patients With Persistent Pain.

The Pain Evaluation and Treatment Center In Macon.

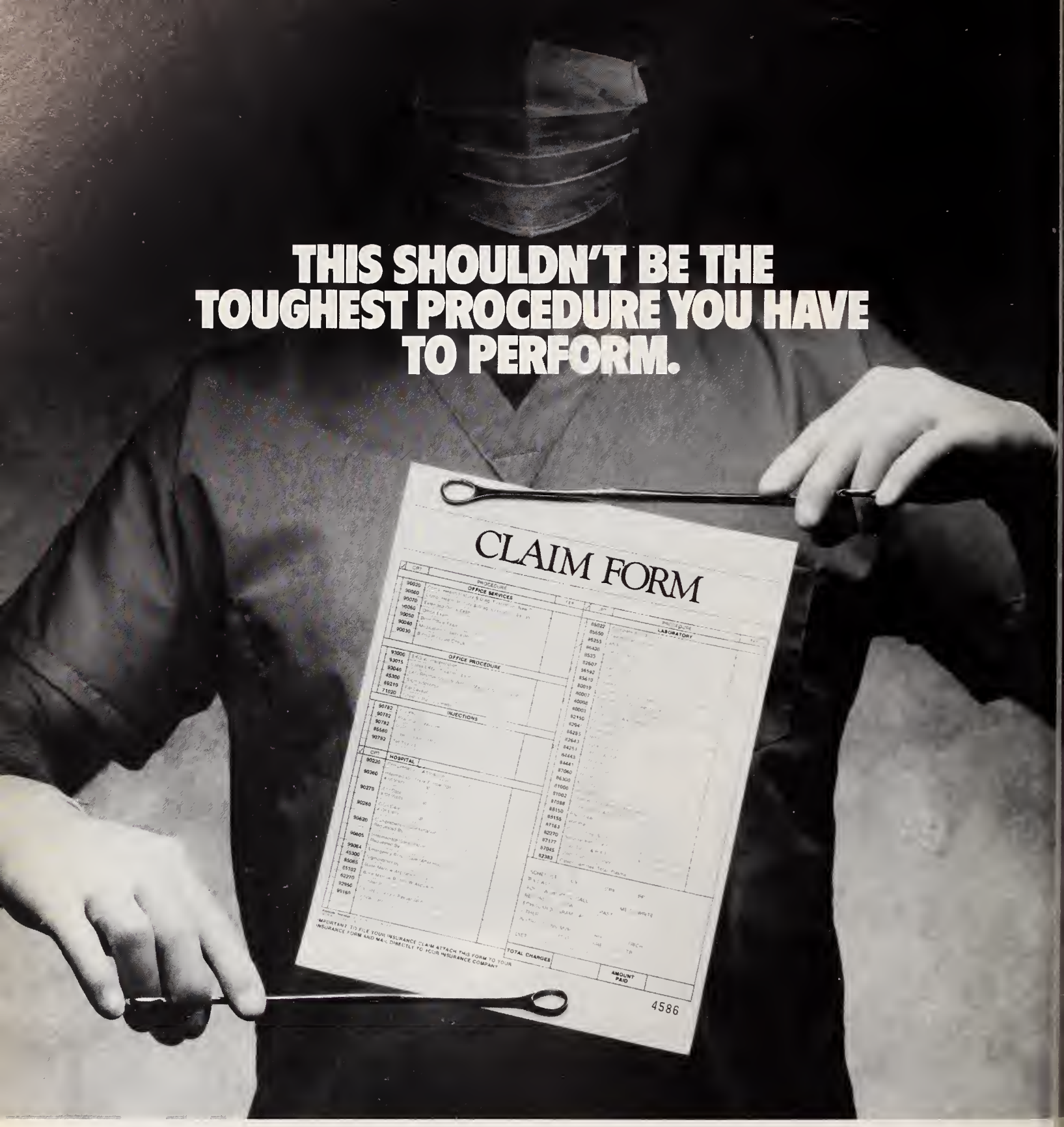
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COVER

The importance of the surgical triad is discussed in this month's editorial by Dr. John Skandalakis who also coordinated the two surgical papers by Dr. Rheudasil et al. and Dr. Smith et al.

Cover photo by Chuck Rogers of Atlanta.

Dear Editor:

Thanks for your fine editorial on "Wilderness" (July, 1986), *JMAG*). I only wish I had written it — it is a real breath of fresh air!

Sincerely,
Steve Janas
Georgia Dental Association

Dear Editor:

Thank you for the good articles on smoking in hospitals, smokeless tobacco, and passive smoking legal actions *(JMAG,* May, 1986). Restrictions or complete banning of smoking tobacco in part or whole of hospital and clinic buildings is appropriate action. Your journal's consideration of this matter is greatly appreciated. Promoting smoke-free environments in health care facilities can only help everyone in the long run.

Our organization is concerned with the air pollution that is produced by smoking tobacco or other materials. Our main purpose is to promote clean indoor air. Smoking is one activity which was brought in out of the cold, but which is not suitable for the indoor environment, especially in modern energy efficient buildings.

* * *

While tobacco has been the number one cause of premature death, it also has been one of the least controlled products. Our members believe that tobacco should be placed under the same restrictions that other sources of pollution bear. Further, because tobacco produces such tremendous burden of disease and death, it should be regulated much more than at the present time. . . .

A vigorous campaign has been waged by the tobacco industry to deceive, to downplay health risks, and to trick us into believing that their products don't produce pollution which is harmful to non-smokers. Therefore, GASP supports the concept that restrictions on the use of these products are necessary.

* * *

It has been 22½ years since Dr. Luther Terry released the first Surgeon General's Report in January 1964. In that time, this most common form of drug addiction has been allowed to hold users in a tight net, and to capture new victims. At the same time, non-users are being forced to breathe the unhealthful toxic by-products of their habit. Does any other product have the privilege of being exempted from regulation by the Food and Drug Administration (as a drug), Consumer Product Safety Commission (as a fire danger and poisonous product), and Environmental Protection Agency (as an air pollutant)? Most, if not all, other products must stand up to the standards set by these federal agencies, while tobacco does not. Congress and the agencies have been part of the problem, and it is time that they earnestly begin being the solution. The new label law is a good start. Congress has been slow to protect non-smokers in the past, and now there is a long way to catch up. Controlling the use of tobacco products is greatly needed.

Tobacco products are the most widely advertised and most readily available products in America. Some experts say that tobacco is the most addictive of the drugs, and hardest to kick. Tobacco has superlatives, but are they the kind which will keep America on top — physically, mentally, morally, and educationally?

Congress has failed us by dragging its feet on this issue. But, the States, counties, cities, hospitals and other agencies have not done as much as they should have either. Adoption of strong rules concerning smoking in medical arts buildings will help. The May issue of the *Journal* has given hospitals a push in the right direction.

With athletes dying from cocaine, actors dying from lung cancer caused by smoking tobacco, and Congressmen arrested for DUI, we might get the impression that America has a little bit of a drug problem. Let's start attacking the problems.

Sincerely,
Chip Spradley
President of GASP
(Georgians Against Smoking Pollution)

QUOTES

Probably no man ever had a friend he did not dislike a little; we are all so constituted by nature no one can possibly entirely approve of us.
E. W. Howe

When once a decision is reached and execution is the order of the day, dismiss absolutely all responsibility and care about the outcome.
William James

While doubt stands still, confidence can erect a skyscraper.
George Lorimer

To be a good critic demands more brains and judgment than most men possess.
Josh Billings

Ridicule is the first and last argument of a fool.
Charles Simmons

Be what nature intended you for, and you will succeed; be anything else and you will be ten thousand times worse than nothing.
Sydney Smith



John D. Watson, Jr., M.D.

An IPA Network of States?

If two heads are better than one in finding solutions, how about 14? The presidents of medical associations of the Southeastern states and somewhat expanded into the southern tier have agreed to meet collectively to discuss problems of mutual interest and projects of mutual interest. I think this is a very important development in that what happens in one state, as what is problematical in one state so frequently occurs in the state adjacent to it. Without having to recreate the wheel, we can see what programs and projects have been attempted and in what manner they were handled. We can thus try to avoid the pitfalls that our brethren have encountered.

One of the main reasons for the development of this meeting is the potential proposal of an IPA network of states, which would have the size and clout sufficient to negotiate with the Federal Government for CHAMPUS programs and possibly eventually Medicare programs. It is the published fact that the Department of Defense wishes to capitate its CHAMPUS program, if at all possible, and has requested proposals and information for same. It would require a multi-state organization to even consider supplying the professional component of this as they wish to divide the nation into approximately three regions. Even if this particular proposal does not reach a satisfactory position, I do believe that the decision to meet, to compare, and to advise can only be to the benefit of all of our component medical organizations. We all do better when we work together and communicate together. This is something that your Association will attempt to do for you at all times.

Sincerely,

John D. Watson Jr. M.D.

THE NEW ORDER
or
"Life Under the Plaintiff's Attorneys"

Dear Friends,

My wife and I are planning a cook-out at our home. We would like for you to attend, but our attorney requests that we submit the following form to you for completion prior to your arrival and as notice of your acceptance of the invitation.

Attestation: I swear that I and my spouse (friend) are of adult age, of sound mind, and make this declaration of our own free will. If we bring children to the affair, we affirm that they are legally ours, mine, hers, or if others, that I have power of attorney to act in their behalf.

I agree that, if any of my party is under the influence of medication or drugs, that individual will not partake of any alcoholic beverages on the premises. We waive the right to inspect kitchen facilities. If the children are to be allowed to play on any type of children's toys, i.e. bikes, swings, etc., I agree to make a personal visit to inspect the items for condition and safety requirements and, if not satisfactory to my inspection, will prevent said children from engaging in play on such devices. I also will affirm that any child or adult that I allow to swim in your pool has had water safety instruction and is certified to swim in a pool. I waive the requirement of a lifeguard if the pool meets my approval.

I agree that one adult, licensed member of my party will refrain from imbibing any agent on your premises that might be construed to represent DUI. I further certify that all of my party is free of communicable diseases such as TB, Herpes, AIDS, Gonorrhea, and Hepatitis, as well as chicken pox and mumps.

L.S. _____

L.S. _____

Witness: _____

Although we would like to have these forms returned 10 days prior to the alleged party, if you are not able to secure a witness, I shall provide a Notary at your request.

Alas! What a joy it is to live in America, where one is unencumbered with the intrusion of others and the threat of prosecution or litigation! Wouldn't it be nice if all people lived with the great Freedoms we enjoy?

John D. Watson, Jr., M.D.
President

SEPTEMBER

17-19 — *Atlanta:* National Conference on Gynecologic Cancer, 1986. Category 1 credit. Contact Diane Fink, MD, American Cancer Society, Prof. Ed. Dept., 90 Park Ave., New York 10016. PH:212/599-8200, x306.

17-19 — *Savannah:* **10th Annual Neonatology — The Sick Newborn.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

18-20 — *Sea Island:* **Georgia Surgical Society Annual Meeting.** Category 1 credit. Contact William C. McGarity, M.D., Secy.-Treas., Emory Clinic, 1365 Clifton Rd., Atlanta 30322. PH:404/321-0111, x3322.

22-26 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

22-26 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

22-27 — *Augusta:* **Obstetrics and Gynecology.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

25-27 — *Hilton Head Island, SC:* **Frontiers in Nutrition.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

26 — *Atlanta:* **Rheumatoid Arthritis: Immunopathogenesis and New Therapies.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

26 — *Atlanta:* **Practical Management of Psychiatric Disorders in Medical Practice.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

26-28 — *Augusta:* **Georgia Gastroenterologic Society Annual Meeting.** Category 1 credit. Contact David M. Taylor, M.D., Secy.-Treas., 960 Johnson Ferry Rd., Ste. 345, Atlanta 30342. PH:404/252-9307.

OCTOBER

2-3 — *Atlanta:* **Georgia Chapter, American Academy of Pediatrics Annual Meeting.** Category 1 credit. Contact William C. Mankin, Exec. Secy., 4059 Land-O-Lakes Dr., Atlanta 30342. PH:404/237-3922.

2-3 — *Atlanta:* **Reproductive Health Care in the 80s.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

6-10 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

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14 — *Columbus:* **6th Annual Day of Endocrinology.** Category 1 credit. Contact Mrs. Judy Anderson, Internal Med. Found., P.O. Box 311, Columbus 31902-0311. PH:404/571-1454.

15-19 — *Atlanta:* **American College of Gastroenterology 1986 Annual Meeting.** Category 1 credit. Contact ACG, 13 Elm St., Manchester, MA 01944. PH:617/927-8330.

16-19 — *Sea Island:* **Georgia Orthopaedic Society Annual Meeting.** Category 1 credit. Contact David F. Apple, Jr., M.D., Secy., 1938 Peachtree Rd., Ste. 710, Atlanta 30309. PH:404/352-2234.

20-21 — *Atlanta:* **Quantitative Thallium Myocardial Tomography.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

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20-24 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

22-25 — *San Francisco, CA:* **American Medical Writers Association 1986 Annual Conference.** Contact Lil Sablack, Exec. Dir., AMWA, 5262 River Rd., Ste. 410, Bethesda, MD 20816. PH:301/986-9119.

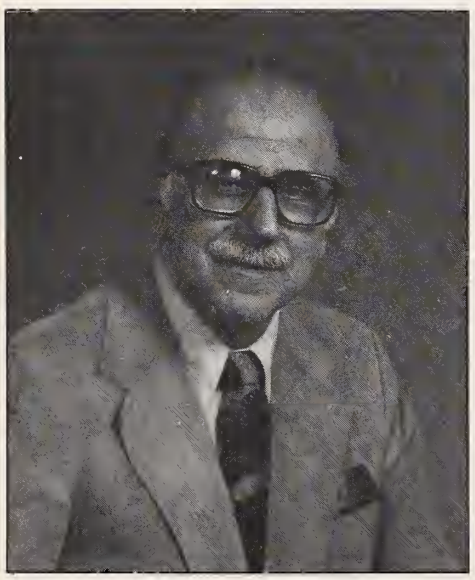
23-24 — *Atlanta:* **Second Conference on Preventing Disease and Promoting Health in the Minority Community.** Category 1 credit. Contact Office of CME, Morehouse Sch. of Med., 720 Westview Dr., Atlanta 30310. PH:404/752-1631 or 1632.

23-25 — *Atlanta:* **Pediatric Radiology: Update 1986.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

24-26 — *Atlanta:* **Shoulder Rehabilitation Symposium.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

26-29 — *Unicoi State Park:* **Institute on Group Behavior and Group Leadership.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH:404/727-5695.

The Hospital, Attending, and Surgical Resident: A Triad



John E. Skandalakis, MD, PhD, FACS
Chris Carlos Professor and Director
The Thalia and Michael Carlos Center for Surgical Anatomy and Technique
Emory University School of Medicine
Senior Attending Surgeon, Piedmont Hospital, Atlanta

"The power of learning may a while prevail
A time prolong a mortal's fleeting breath
But useless all her arts are to avail
To conquer Fate or check the land of Death."

SOPHOCLES

BY ALL MEANS the hospital, the attending surgeon, and the resident are the parts of an inseparable unit. The making of the surgeon of tomorrow depends upon the good will of the hospital (a teaching hospital if possible). It depends upon the attending physician who must have the will and the free time to teach, plus something unique, which we call ecumenical spirit. The resident in surgery must become a member of the team by hard work and hard preparation. But let's evaluate these three entities one by one.

The Hospital

The first responsibility of any hospital is good patient care. The motto of every hospital should be "the patient comes first," but it does not mean that this represents the only obligation of the hospital. The hospital can pay more than lip service to the motto if the governing head and the staff want a training program. I honestly feel, after being Director of Surgical Education in a community hospital for 17 years, that such a program will give the patient the best care and the resident the best training.

The community hospital should support teaching, postgraduate training, clinical research, and team work between the surgeon of today and the surgeon of tomorrow. The hospital should provide lectures, seminars, visiting professorships, and a good library. The hospital's board of trustees should go out of its way to finance such a program so that the attending as well as the resident have a special feeling that the hospital cares about them. The resident should be paid well enough to be able to spend time in the library and not in moonlighting. There must be good on-call accommodations and an office for the chief resident. The attending physician should hear from time to time from the hospital authorities, "Thanks for all these good things we couldn't have done without you."

The Attending Surgeon

"A surgeon who deliberately fails to train young men (or women) is guilty of a crime against humanity."

JOHN CHALMERS DA COSTA

"Instruction in youth is like the planting of the seed in the ground at the proper season."

HIPPOCRATES

"The community hospital should support teaching, postgraduate training, clinical research, and team work between the surgeon of today and the surgeon of tomorrow."

These two quotations say everything about the training of a surgeon and about the responsibility of the attending physician. Da Costa presented many years ago some apothegms, some aphorisms, and some epigrams. I will not cite his, but I will express my own philosophy about the duty and responsibility of the attending surgeon.

The attending surgeon:

1) must accept the resident as a junior associate (camaraderie).
2) should present the resident to the patient as an "alter ego" emphasizing to the patient that team work will produce better results.
3) must develop patience.
4) must understand that the resident is not a slave but a colleague.
5) must stay with the resident in the operating room from skin to skin and advise the resident what to do and what not to do.
6) must, by all means, take over if the situation is critical or if the resident is not able to do the job.
7) must find time to discuss pre-operative and post-operative care with the resident.
8) must advise the resident what to read, how to read, and how to find the answers through books.
9) finally, the attending should do his own homework on rounds, grand rounds and conferences in order to teach the resident standards of rigor, the idea of proof, and the idea of logical necessity.

The Resident in Surgery

The resident should be intelligent and honest. As a team player, the resident must be organized, hardworking, and responsible, with good stamina and initiative. He or she must be willing to learn and able to accept criticism.

"If this triad functions smoothly, the end results will be magnificent."

This editorial was stimulated by two papers in this issue of the *Journal* presented by our residents with our assistance.

In summary, if this triad functions smoothly, the end results will be magnificent. The hospital will be successful; the attending will have a good place to practice and teach; the resident, the hope of tomorrow, will never permit the "mystic chords of memory," to quote Lincoln, to forget his or her alma mater and teacher; and the patient, by all means, will be most grateful.

Physician Recognition Award Recipients

LISTED BELOW *are those physicians in Georgia who have earned the AMA's Physician's Recognition Award (PRA) from April through June, 1986.*

The Award was established by the AMA House of Delegates in 1968 "to recognize, encourage, and support physicians who participate regularly in continuing medical education and to emphasize the importance of developing more meaningful continuing medical education opportunities for physicians." A minimum of 150 credit hours of CME must be earned over a 3-year period to qualify for the Award. The hours may include such activities as conferences, residencies, teaching, writing, private reading, listening to cassettes, home study courses, consultation, and peer review; at least 60 of the hours, however, must be from formal CME programs sponsored or co-sponsored for Category I credit by organizations accredited for these activities.

We congratulate the following physicians who have distinguished themselves and their profession by their commitment to continuing education:

Larry L. Ackerman, Savannah
Young W. Ahn, Atlanta
Benjamin S. Anderson, Cedartown
Catherine S. Andrews, Kennesaw
Teofredo C. Abranas, Columbus
J. Arthur Bishop, Calhoun
William F. Bloom, Macon
Clorinda S. Bohler, Augusta
William K. Bostock, Augusta
Ker Boyce, Dunwoody
William R. Camp, Altlanta
Richard E. Chernecky, Lawrenceville
Michael D. Chidester, St. Marys
Robert E. Clayton, Columbus
Chappell A. Collins, Albany
Lanny R. Copeland, Moultrie
Gerald M. Cross, Augusta
Bennie L. Davis, East Point
Billy J. Davis, Hartwell
Henry G. Davis, Sylvester
John B. Davis, Augusta
Ronald M. Davis, Decatur
Jose M. De La Torre, Milledgeville
David B. Dennison, Atlanta
Jayaprakash Desai, Lawrenceville
William A. Dodd, Macon
John R. Duttenhaver, Savannah
Stephen B. Edelson, Decatur
Earl R. Feringa, Augusta
David E. Field, Canton
Jose M. Figueroa, Atlanta
Stanley M. Fineman, Marietta
Joseph B. Floyd, Stone Mountain
James C. Freeman, Sylvania
John T. Galambos, Atlanta
Donald G. Gallup, Augusta
Cyler D. Garner, Gordon
Glen E. Garrison, Augusta
Frederick E. Gilbert, Newnan
Alan K. Goldberg, Augusta
Frances B. Grant, Vienna
J. Ray Grant, Forsyth
William E. Gray, College Park
Charles G. Green, Waynesboro
James R. Hagler, Buena Vista
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Donald A. Human, Demorest
Charles W. Johns, Macon
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Thomas A. Joiner, Macon
Garland F. Jones, Augusta
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Arthur D. McGugan, Savannah
Salvador A. Mendez, Milledgeville
Michael D. Morris, Macon
Juan A. Mujica, Riverdale
Susan E. Mumper, Atlanta
Edward O. Nix, Tucker
Richard W. Nysewander, Tucker
Magdy A. Osman, Savannah
Mukia D. Parekh, Atlanta
Ramesh V. Patwardhan, Savannah
William R. Payne, Cartersville
Eladio Pereira, Atlanta
Neil G. Perkinson, Atlanta
Timothy F. Persse, Savannah
Mark P. Pfeifer, Atlanta
Richard P. Pierzchsjlo, Tifton
T. Nelson Pirkle, LaGrange
Ross B. Pollack, Columbus
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Frank A. Raila, Augusta
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Florence B. Shafiq, Lithonia
Mukta K. Shah, Tucker
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Robert E. Smith, Rome
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G. Alan Stoudemire, Atlanta
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Titus A. Taube, Cochran
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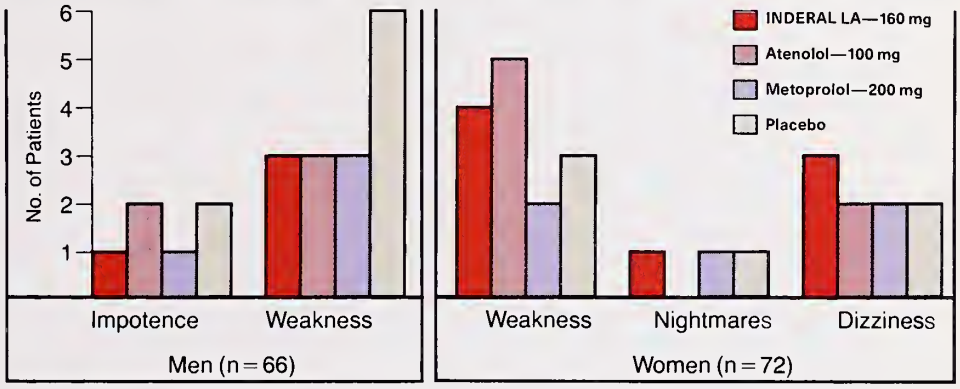
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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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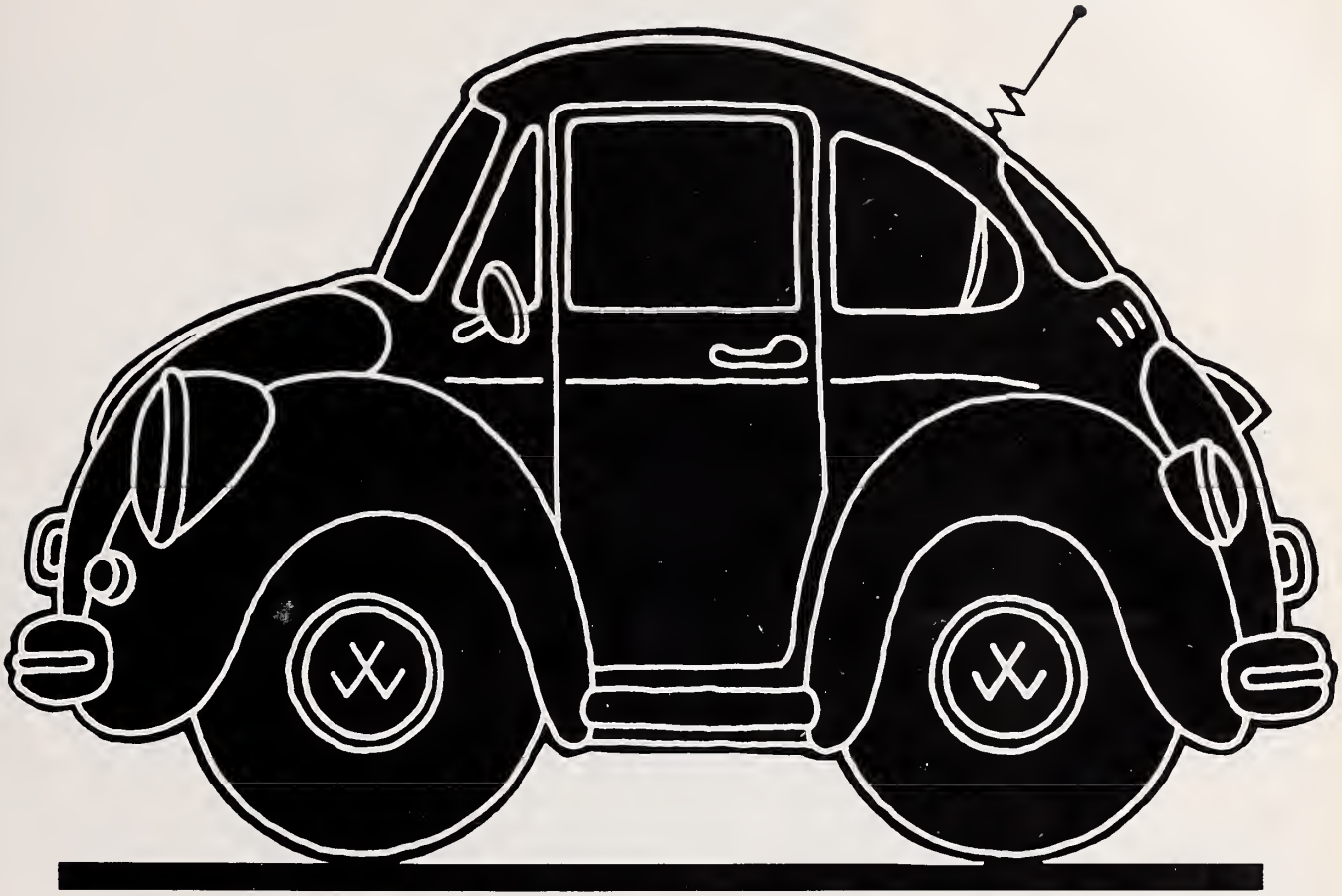
REFERENCE:

1. Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321–1323.

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TRUE PANCREATIC CYSTS: A REVIEW

J. MARK RHEUDASIL, M.D., BOBBY BROWN, M.D.,
STEPHEN W. GRAY, PH.D., JOHN E. SKANDALAKIS, M.D.

Introduction

With the advent of improved imaging techniques, pancreatic cysts are being recognized with increasing frequency. The vast majority of these are pancreatic pseudocysts, secondary to chronic pancreatitis or trauma. Pseudocysts are cavities filled with pancreatic fluid debris and other elements with a fibrous, non-epithelialized capsule. Occasionally, pancreatic cysts are lined by epithelium and thus are defined as true cysts. We recently had the opportunity to care for two patients with true pancreatic cysts which presented in adulthood. They exhibit the clinical features, diagnosis, and treatment of these rare pancreatic cysts.



Figure 1. CT scan shows an obvious large cyst.

Case Reports

Case 1: L.K. is a healthy 38-year-old white female who noted the gradual onset of intermittent left upper quadrant abdominal pain approximately 1 month prior to admission. This pain was associated with occasional nausea and vomiting, but there was no history of fever, chills, jaundice, bleeding, or bowel disturbances. Out-patient work-up consisted of an upper G.I. series, barium enema, ultrasound, and IVP, all of which were normal. When the pain persisted, a CT scan was performed which revealed a 9x7 cm cystic mass in the region of the tail of the pancreas (Figure 1). An endoscopic retrograde cholangiopancreatography (ERCP) was then performed in which there was rapid fill of dye from the pancreatic ductal system into the cyst (Figure 2). The patient had no previous history of pancreatitis and no history of abdominal trauma, but did admit to a fondness for white water rafting. Her laboratory values were entirely normal, including an amylase of 80.

An exploratory laparotomy was performed which revealed a smooth cyst on a pedicle of pancreatic tissue at the inferior border of the junction of the body and tail of the pancreas. Although intimately adherent to the transverse mesocolon, the cyst was excised along with a small portion of pancreatic tissue, preserving the spleen. There was no evidence of hepatic or renal cysts, and no other intra-abdominal pathology was noted. Histologic examination revealed epithelial tissue lining the cyst and no

Dr. Rheudasil is Resident in Surgery, Piedmont Hospital; Dr. Brown is Pathologist, Piedmont Hospital; Dr. Gray is Professor Emeritus of Anatomy, Associate Director, Center for Surgical Anatomy and Technique, Emory Univ. Sch. of Med.; and Dr. Skandalakis is Chris Carlos Professor and Director, The Thalia and Michael Carlos Center for Surgical Anatomy and Technique, Emory Univ. Sch. of Med., and Senior Attending Surgeon, Piedmont Hospital, Atlanta.

Send reprint requests to Dr. Skandalakis, Emory Univ. Sch. of Med., 1440 Clifton Rd., 105 WHSCAB, Atlanta, GA 30322.



Figure 2. ERCP shows a small amount of contrast within the dependent portion of the cyst.

evidence of neoplastic tissue. Her postoperative course was uncomplicated and she was discharged on the sixth postoperative day. She has been seen twice in follow up and is presently entirely asymptomatic.

Case 2: D.T. is a 31-year-old white female who was 8 weeks postpartum. She gave a 2-year history of dull, nonradiating right lower quadrant pain. CT scan of the abdomen revealed a 10-14 cm cyst, a mass in the tail of the pancreas. Stones were also seen in the gall bladder. She underwent laparotomy at which time a partial pancreatectomy was performed with removal of the cyst. Cholecystectomy was also performed. Pathologic examination showed an epithelialized cyst with no evidence of pancreatitis. Postoperative course was uneventful, and the patient is doing well.

Discussion

The signs and symptoms of pancreatic cysts may vary, depending upon their size and location. In general, pancreatic fluid collections less than 5 cm in diameter go unnoticed by the patient. In addition, involvement of other structures or the development of complications such as hemorrhage, infection, or rupture may produce the initial symptoms. Approximately 80% of patients will have upper abdominal pain and many will describe nausea and vomiting. Weight loss is also a prominent feature in many patients.

Currently, the three studies most useful in evaluating the pancreas include computed tomography, ultrasonography, cytology, and ERCP. In addition, angiography may be very helpful in some cases.

The differential diagnosis of a fluid-filled cavity in the region of the pancreas should include not only pancreatic cysts and pseudocysts, but also renal and adrenal cysts, intestinal duplication cysts, and cysts of the mesentery. True pancreatic cysts can be divided into two categories: congenital and acquired (Table 1).

TABLE 1 — Types of True Pancreatic Cysts

Congenital
Single
Polycystic disease
Cystic fibrosis
Dermoid cyst
Acquired
Retention
Parasitic
Neoplastic
—cystadenoma
—cystadenocarcinoma

Congenital Cysts

Single Cysts: Single congenital cysts of the pancreas are very rare.[5] The largest single series is from Miles (1959)[7] which included eight cases occurring in infants, most of whom were found to have an unexplained abdominal mass. Jordan (1960)[6] reported two cases seen during life and an additional three cases found incidentally at autopsy. In addition, Olurin[10] reported two cases in Nigeria. There have also been two reported cases of pancreatic duplication cysts.[11] Each of these cysts was lined with cuboidal or columnar epithelium, presumably ductal in origin. Our case is the only one known in which a communication with the main pancreatic duct has been demonstrated. Preoperatively, excision of these cysts is the treatment of choice and is usually possible.

Polycystic Disease and Cystic Fibrosis: Polycystic disease of the pancreas is often seen in association with cysts of the liver and kidneys.[2] Lo-

cated in all parts of the gland, these cysts, which are lined with cuboidal epithelium, rarely lead to problems which require surgical intervention. Approximately one-half of patients with von Hipple-Lindau's Syndrome (cerebellar and retinal hemangioblastomas) have multiple pancreatic cysts.[3] Nygaard and Stacy[9] reported a single large pancreatic cyst associated with cysts in the liver.

Multiple cysts may be found in the pancreas of patients with cystic fibrosis (mucoviscidosis). These cysts, filled with inspissated secretion, produce widespread ductal obstruction. Although the pulmonary complications account for the greatest morbidity and mortality associated with this disease, approximately 90% of these patients may manifest pancreatic exocrine insufficiency. While these patients may suffer from recurrent pancreatitis, they commonly require surgery as a result of the pancreatic component of their disease.

Dermoid Cysts: Dermoid cysts of the pancreas are exceedingly rare. Like teratomas elsewhere, these cysts have contained sebum, hair, teeth, etc.[3] Although marsupialization was initially used, this can produce a chronically draining sinus which results in considerable morbidity. Clearly, excision is now the treatment of choice for symptomatic lesions.

Acquired Cysts

Retention Cyst: A retention cyst is not a true cyst but a dilatation of a pancreatic duct behind a point of obstruction. Described more than 120 years ago by Virchow, these cysts are lined with epithelium which may be incomplete. Inflammation or increasing pressure within the cysts may lead to flattening or obliteration of the epithelial lining and subsequent difficulty in distinguishing these lesions from pseudocysts.

These cysts may be single or multiple and usually have a demonstrable communication with the pancreatic ductal system by ERCP. Retention cysts occur commonly in patients with chronic pancreatitis and occasionally develop distal to malignant ductal obstruction or fibrotic obstruction of the ampulla of Vater.

"True pancreatic cysts, unlike the more common pseudocysts, are lined with epithelium and have multiple etiologies."

Although often found incidentally during pancreatic radiography, these cysts may produce abdominal pain, obstructive jaundice, or elevated pancreatic enzymes. They do not resolve spontaneously, and tend to enlarge, often giving rise to complications. Treatment of retention cysts must be directed not only at the cyst(s) but also the underlying pancreatic disorder. In patients with chronic pancreatitis, severe enough to justify resection, Warren[13] reports improvement in 80% of patients in whom the cyst was excised in continuity. In less severe pancreatitis, internal drainage may be the most reasonable therapy. While retention cysts are per se an indication for operation, major treatment considerations should be directed to the underlying pancreatitis. An "extensive sphincteroplasty" may be the only treatment necessary for the rare patient with symptomatic retention cysts in the head of the pancreas resulting from ampullary fibrotic obstruction.[8]

Parasitic Cysts: Parasitic cysts of the pancreas are extremely rare; no cases have been reported in the United States in recent years. These cysts are echinoccocus (hydatid) cysts which occur primarily in sheep herding countries of the Middle East, Australia, and New Zealand. Even in documented echinococcus infestation, pancreatic involvement occurs in only one in a thousand cases; most cysts occur in the liver and lungs. Although standard radiographic evaluation may reveal a cyst, this lesion is rarely suspected preoperatively. Symptoms usually arise only after the cyst has attained sufficient size to cause discomfort. If the diagnosis is considered preoperatively, the indirect hemagglutination or bentonite flocculation tests may be helpful. The treatment of all accessible hydatic cysts is surgical. Although enucleation is optimal, aspiration of cyst fluid and replacement with 10% formalin should kill the protoscolices and germinal membranes and thus eliminate the organism. This fluid should be removed after 5 minutes. If the cyst is large or infected, however, marsupialization may be the only alternative.[2]

Neoplastic: Neoplastic cysts account for approximately 10% of all pancreatic cysts.[1] Although uncommon, there were 325 reported pancreatic cystadenomas reported in the literature as of 1981.[12] Cystadenoma is primarily a disease of middle-aged women, occurring six times more frequently than in men. Most neoplastic cysts located in the body and tail of the gland are presumably true neoplasms originating from the pancreatic duct. While many are asymptomatic, there is often abdominal discomfort associated with a slowly expanding lesion. In addition, there may be gastrointestinal bleeding from erosion into an adjacent viscus or as a result of splenic vein thrombosis and subsequent left sided portal hypertension. Jaundice may be seen if there is common bile duct obstruction or diffuse metastatic involvement of the liver. Diabetes mellitus is found in 20% of patients with cystadenomas of the pancreas.

"Polycystic disease of the pancreas is often seen in association with cysts of the liver and kidneys."

While most neoplastic cysts of the pancreas are demonstrated by CT or

ultrasound, upper GI series may reveal displacement of the stomach or duodenal loop. If the diagnosis is considered preoperatively, celiac arteriography is a useful study, often showing displacement of the pancreatic arteries around the mass, large feeding vessels, and a tumor blush in the venous phase.

Cystadenomas occur in two basic varieties: a) Serous — unilocular or multilocular tumors composed of innumerable small cysts giving a honeycomb appearance on cross section, and b) Mucinous — containing large cystic spaces lined with columnar epithelium and goblet cells. Mucinous cystadenomas may undergo malignant degeneration and are generally considered to be the precursor of cystadenocarcinoma. There is no communication with the main pancreatic ducts.[4]

"Our case is the only one known in which a communication with the main pancreatic duct has been demonstrated."

Cystadenomas should be totally excised when possible, as drainage is inadequate due to their multiple loculations. Occasionally, they may invade the superior mesenteric artery, portal vein, or middle colic vessels, and it may be more prudent to perform partial drainage or marsupialization, given that these are slow growing tumors and rarely undergo malignant changes.

Cystadenocarcinomas comprise approximately 1% of all malignant pancreatic tumors and are one half to one third as common as cystadenomas. They usually arise from mucinous cystadenomas and are large, unilocular cysts containing mucinous papillary excrescences.

Surgical treatment for cystadenocarcinoma consists of total tumor extirpation which may include partial or total pancreatectomy or pancreaticoduodenectomy. After complete excision, the 5-year survival is 68 percent in the Mayo Clinic series, while "noncurative" resected carries a 14% 5-year survival.

Summary

True pancreatic cysts, unlike the more common pseudocysts, are lined with epithelium and have multiple etiologies. While most are benign, the potential for malignancy must always be considered, especially when evaluating a pancreatic cyst in a patient with no previous history of pancreatitis or trauma. To our knowledge, *Case 1* is the first report of preoperative demonstration of ductal communication in a true pancreatic cyst. Excision of such a cyst is often possible and is considered the treatment of choice for symptomatic lesions and those in which the possibility of neoplasia cannot be excluded.

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PRIMARY HODGKIN'S DISEASE OF THE THYROID GLAND

PETER SMITH, M.D., BOBBY BROWN, M.D.,
STEPHEN W. GRAY, PH.D., JOHN E. SKANDALAKIS, M.D.

HODGKIN'S DISEASE usually presents as a painless enlargement of lymph nodes, with or without constitutional symptoms such as fever, chills, anorexia, and weight loss. Extranodal presentation is uncommon. Hodgkin's disease presenting as thyroid mass is extremely rare, with only 19 cases reported in the literature. We will present a case and examine the 19 other cases reported (Table 1).

Case Report

The patient is a 19-year-old white female with a 5-year history of a 2 cm midline mass in the region of the pyramidal lobe of the thyroid. She had been in her usual state of health until 3 months prior to admission when she noted an enlargement of the midline mass, dysphagia, and mild shortness of breath. She had an unexplained 20 pound weight gain over the last year and a 6 pound gain over the last 2 weeks, but denied any edema or heat or cold intolerance. There were no heart palpitations.

On physical examination, she was found to have a diffuse enlargement of the thyroid gland most obvious in the region of the pyramidal lobe. The physical exam was otherwise unremarkable except for multiple skin excoriations due to a long history of unexplained itching. Past medical history revealed thyroid goiter. Preoperative thyroid scan suggested increased activity in the medial aspect of the right upper pole. Uptake was within normal limits, with 32% RIA uptake (10-36%). Palpation showed a mass much larger than that appearing on scan. Thyroid sonogram revealed uniform texture without cysts or nodules. Anti-thyroglobulin and antithyroid microsome antibodies were both negative. T_4 was 9.3 (4.6-12.4), T_3U 25% (23-35%), Free T_4 1.7 (1.1-2.9), and FTI 2.3 (1.2-3.4).

Surgical exploration revealed a thyroid with a hard, almost stony consistency. Both lobes were fixed to the neck strap muscles, trachea, and the esophagus. There were small necrotic areas scattered over the surface of the gland which was nodular, resembling multiple degenerative thyroid nodules. No cervical lymph nodes were palpated. Because of the unusual appearance of the gland, intraoperative consultation was obtained from three general surgeons and a pathologist. Multiple excisional biopsies were obtained. The wound was closed in the usual manner using two small penrose drains. Frozen sections were inconclusive. The permanent slides showed a neoplastic, polymorphic process containing plasma cells, eosinophils, lymphocytes and large malignant-appearing reticulum cells, some of which had characteristics of Reed-Sternberg cells. Final pathology report was nodular sclerosing Hodgkin's disease.

Postoperatively, the patient did well. She had a bone marrow biopsy which revealed mild myeloid hyperplasia, mild eosinophilia with a slight increase in iron stores but no evidence of involvement by Hodgkin's disease. CT scan of the neck, thorax, and abdomen failed to show any evidence of adenopathy or additional soft tissue abnormalities. Serum immunoglobulins were normal, as was TSH level. Bipedal lymphangiogram was reported as normal.

Discussion

Hodgkin's disease usually presents as a painless enlargement of lymph nodes in the cervical or supraclavicular area. Extranodal presentation is seen in the head and neck, central nervous system, skin, endocrine glands, genitourinary tract and gastrointestinal tract.[6] Nineteen other cases of primary thyroid Hodgkin's lymphoma have been reported[1-9] (Table 1). Hodgkin's disease is usually classified according to the Ann Arbor Staging System (Table 2).

The letter "E" after the stage designates the extralymphatic location of the disease. That is, outside the lymph nodes, spleen, Waldeyer's ring, Peyer's patches, thymus or appendix. While Hodgkin's disease is usually described as a neoplasm of lymphoid

Dr. Smith is a Resident in Surgery, Piedmont Hospital; Dr. Brown is a Pathologist at Piedmont Hospital; Dr. Gray is Emeritus Professor of Anatomy, Associate Director of the Center for Surgical Anatomy and Technique, Emory Univ. Sch. of Med.; Dr. Skandalakis is Chris Carlos Professor and Director, The Thalia and Michael Carlos Center for Surgical Anatomy and Technique, Emory Univ. Sch. of Med., and Senior Attending Surgeon, Piedmont Hospital, Atlanta.

Send reprint requests to Dr. Skandalakis, Emory Univ. Sch. of Med., 1440 Clifton Rd., 105 WHSCAB, Atlanta 30322.

Table 1 — Reported Cases of Primary Thyroid Hodgkin's Lymphoma

Author	*Patient*	*Presentation*	*Operative Findings*	*Treatment*	*Comments*
Smith et al. 1986	19y/o F	Painless enlarging thyroid mass, recent weight gain, dysplagia chemically euthyroid	Very hard gland adherent to contiguous structures	Excisional biopsies and radiation therapy of neck, mediastinum, para-aortic and splenic area	Doing well 17 mos s/p surgery and 15 mos s/p completion of radiation therapy (3760 rads to upper mantle and 2740 rads to para-aortic nodes
Kugler et al. 1982	22y/o F	Rapidly enlarging thyroid mass with dysphagia, hoarseness, respiratory stridor, weight loss, mild hyperphagia, tachycardia. Clinically hyperthyroid	7x6 cm mass left lobe adherent to strap muscles, trachea, esopohagus, recurrent nerve		
Abel and Finnerty 1969	16y/o M	Enlarging thyroid mass dysphagia and pressure in neck. Chemically euthyroid	11x6x4 cm yellow white gritty mass. Substernal	Thyroidectomy and 4000 r gamma radiation. Neck and mediastinum 2000 r axilla and supraclavicular areas	3½ yr follow up. No evidence of disease
Bouche et al. 1965	18y/o F	Enlarging neck mass, compression symptoms		Thyroidectomy and 5000 r	No recurrence at 5 mo
	28y/o F	Neck mass, right recurrent nerve dysfunction		Mediastinum 3,000 r supraclavicular area	Died from asphyxia
Gibson and Prinn, 1968	59y/o F	6 yr history showing enlarging neck mass. No compression symptoms chemically and clinically euthyroid	Appearance similar to multinodular goiter with lymph node pathology	⅘ thyroidectomy 3000 r anterior to posterior fields	6 mos follow up. No evidence of disease
Rupp, Moran	64y/o M	Tender neck mass, fever, weight loss, dysphagia. Chemically euthyroid. No response to steroids	135 gm grayish-tan gland	Thyroidectomy	
Roberts & Howard, 1962 (also reviewed cases listed below)	61y/o M	Painful enlarging neck mass. Rt vocal cord paralysis. Subtotal thyroidectomy 11 yrs previous	Hard, fixed mass rt side of neck. Extension into mediastinum	Debulked	Slides from both operations, 1946 & 1958 showed Hodgkin's lymphoma. Pt admitted 1961 because of perforation of distal ileus due to reticulum sarcoma
Smithers, 1959	32y/o F			Subtotal thyroidectomy and radiation	Survived 7 yrs
	57y/o M			Subtotal thyroidectomy	Died 16 mos later with fulminant Hodgkin's disease
	(mentions a 3rd case)				
Meissner, 1955	1 case	Discussed in Head and Neck Tumor Seminar			
Rovello, 1955	28y/o F 2 others discussed			Subtotal thyroidectomy	Survived 13 wks
Cohen & Moore, 1954	1 case mentioned in series of 101 malignancies				
Presno & Bastiony, 1936	18y/o F	Thyroid nodule for 1 yr		Subtotal thyroidectomy	Survived 3+ yrs
Sternberg, 1936	2 cases	autopsy series			
Kramer, 1930	48y/o F			Subtotal thyroidectomy and radiation	Died 12 yrs postop with generalized lymphoma

Table 2 — Ann Arbor Staging Classification[10]

Pathologic Stage	*Involvement*	
I	I	Single lymph node region
	I_E	Single extralymphatic site
II	II	2 Lymph node regions on same side of diaphragm
	II_E	Single extralymphatic site plus lymph node involvement on same side of diaphragm
	II_S	Splenic involvement in addition to lymph nodes on same side diaphragm
III	III	Lymph nodes on both sides of diaphragm
	III_E	Single extralymphatic site plus lymph node involvement on both sides of diaphragm
	III_S	Lymph node and splenic disease involving both sides of diaphragm
IV		Disseminated extralymphatic disease

tissue, it is speculated that extra-nodal disease may arise from malignant transformation of tiny islands of lymphatic tissue normally found in these extralymphatic areas.[6]

From analysis of the world literature it appears that the incidence of thyroid Hodgkin's disease follows the well described bimodal incidence of the more common presentation of the illness. It is usually seen in the second and third decades and the sixth and seventh decades and is more common in females.

"Many of the clinical aspects of primary thyroid Hodgkin's disease parallel that of the more common lymphatic presentation of the disease."

The prognosis of primary thyroid Hodgkin's seems to parallel that of the lymphatic presentation of the disease for any given stage. The patient we presented would be Stage II_E using the latest Ann Arbor Classification system. We believe that these unusual patients should be treated as would any other person with similar stage disease.

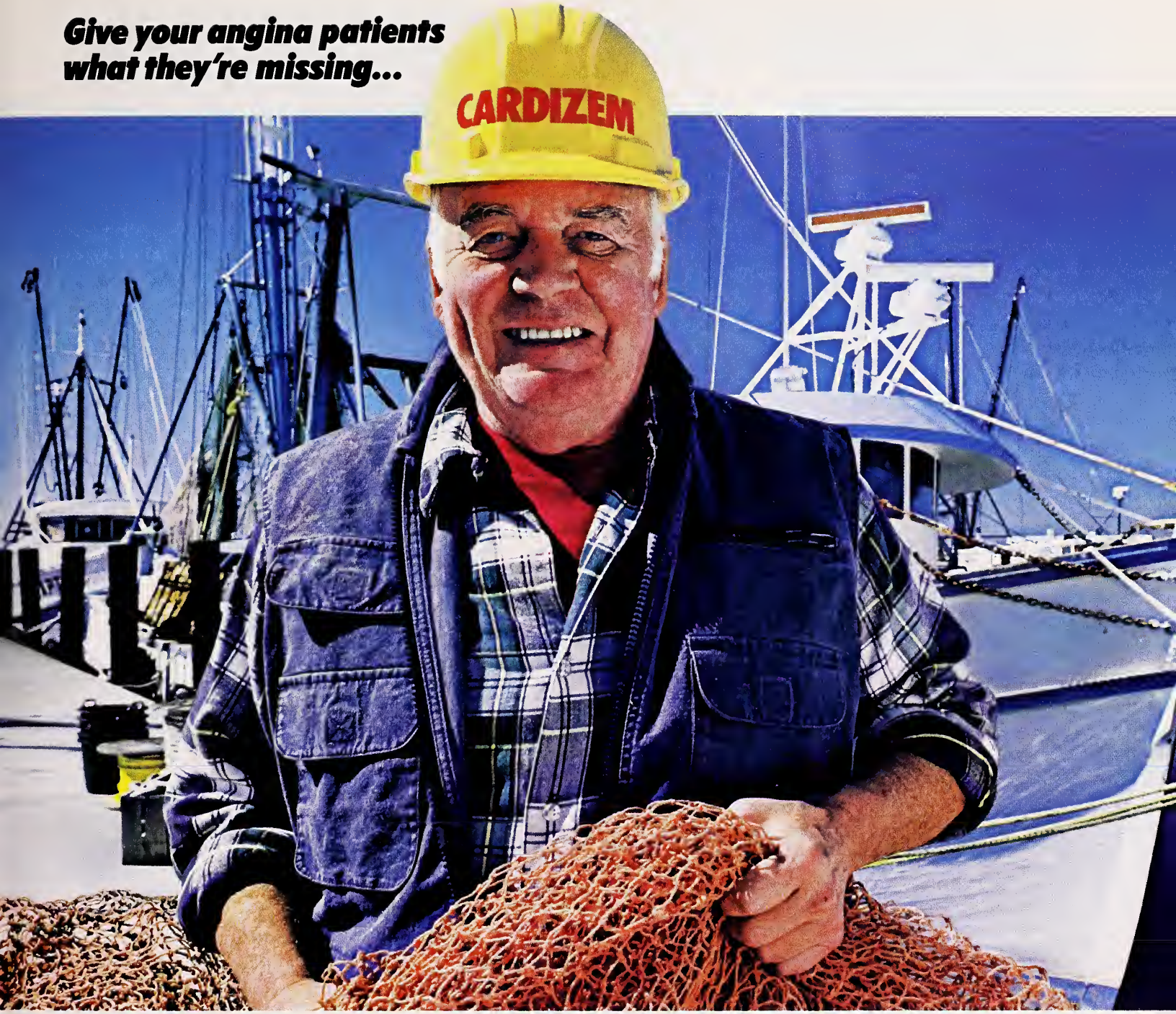
Summary

We have described a patient with a very unusual thyroid presentation of Hodgkin's disease. We were able to find only 19 other similar cases. Many of the clinical aspects of primary thyroid Hodgkin's disease parallel that of the more common lymphatic presentation of the disease, and we believe the prognosis and treatment should be similar.

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PRECAUTIONS
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Drug Interaction. *Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)*
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Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.*
Pregnancy. *Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.*
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Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS
Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.
In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.
The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastrointestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 11/85*
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Pediatric internship, residency and fellowship
in Pediatric Endocrinology and Diabetes
at Children's Hospital, Buffalo, NY

Co-Medical Director:
Stephen W. Anderson, M.D.
Pediatric internship, residency and fellowship
in Pediatric Endocrinology and Diabetes
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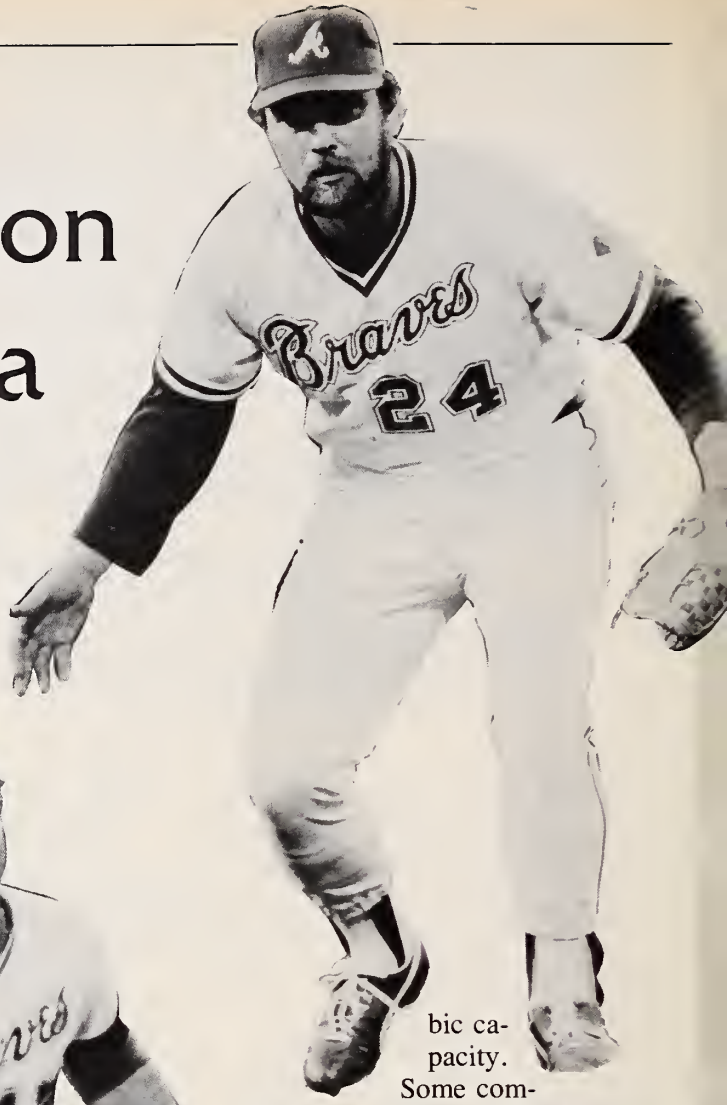
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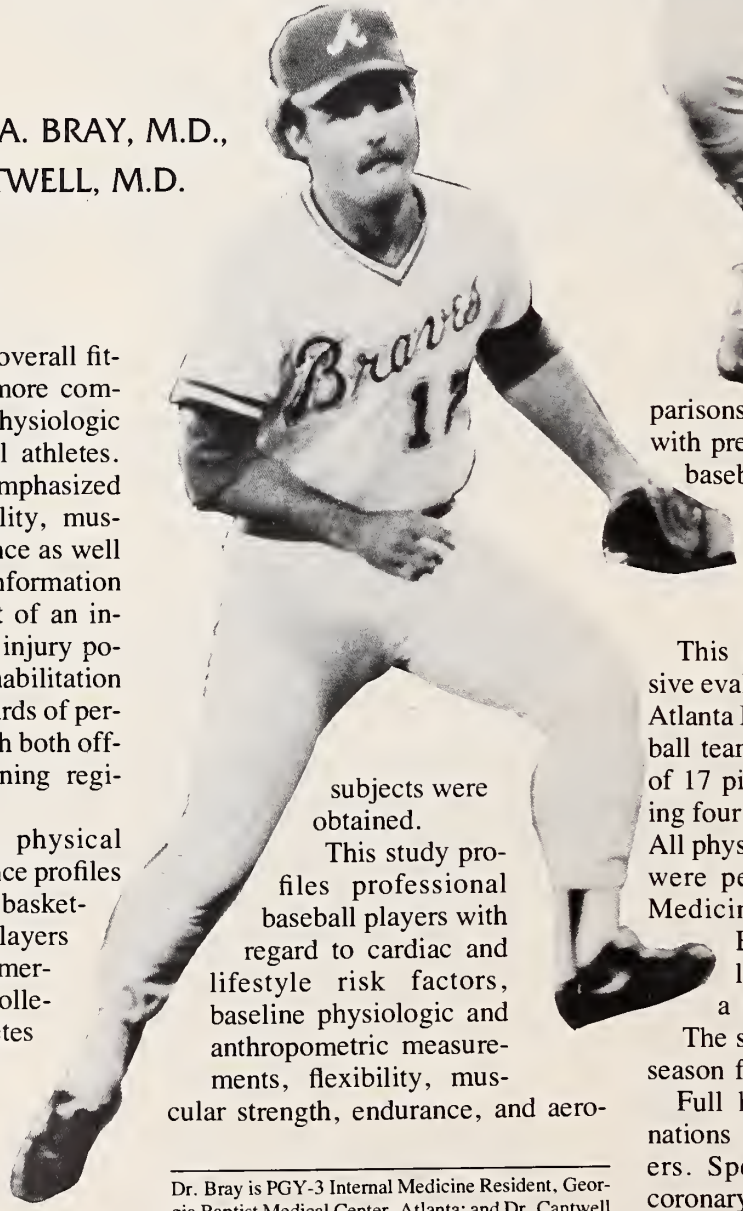
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Fitness Evaluation of a Major League Baseball Team



DAVID A. BRAY, M.D.,
JOHN D. CANTWELL, M.D.



Introduction

INCREASING INTEREST in overall fitness in sports has led to more comprehensive physical and physiologic evaluations of professional athletes. Such evaluations have emphasized body composition, flexibility, muscular strength, and endurance as well as aerobic capacity. This information can provide an assessment of an individual's level of fitness, injury potential, or progress in rehabilitation following an injury. Standards of performance and guidance with both off-season and in-season training regimens can be established.

Studies characterizing physical composition and performance profiles of professional football, basketball, hockey, and soccer players have been reported.[1-7] Numerous studies of amateur, collegiate, and Olympic athletes can be found in the literature.[8-13] Recent reports by Coleman and Gurry et al. provided the initial research involving professional baseball players.[14-17] From their work, baseline data for comparison with the present study subjects were obtained.

This study profiles professional baseball players with regard to cardiac and lifestyle risk factors, baseline physiologic and anthropometric measurements, flexibility, muscular strength, endurance, and aerobic capacity. Some comparisons of certain variables are made with previous studies of professional baseball players and professional and amateur athletes from other sports.

Dr. Bray is PGY-3 Internal Medicine Resident, Georgia Baptist Medical Center, Atlanta; and Dr. Cantwell is Program Director in Internal Medicine, Georgia Baptist Medical Center, and a team physician of the Atlanta Braves. Send reprint requests to Dr. Cantwell, Georgia Baptist Medical Center, 300 Boulevard, Atlanta, GA 30312.

Methods

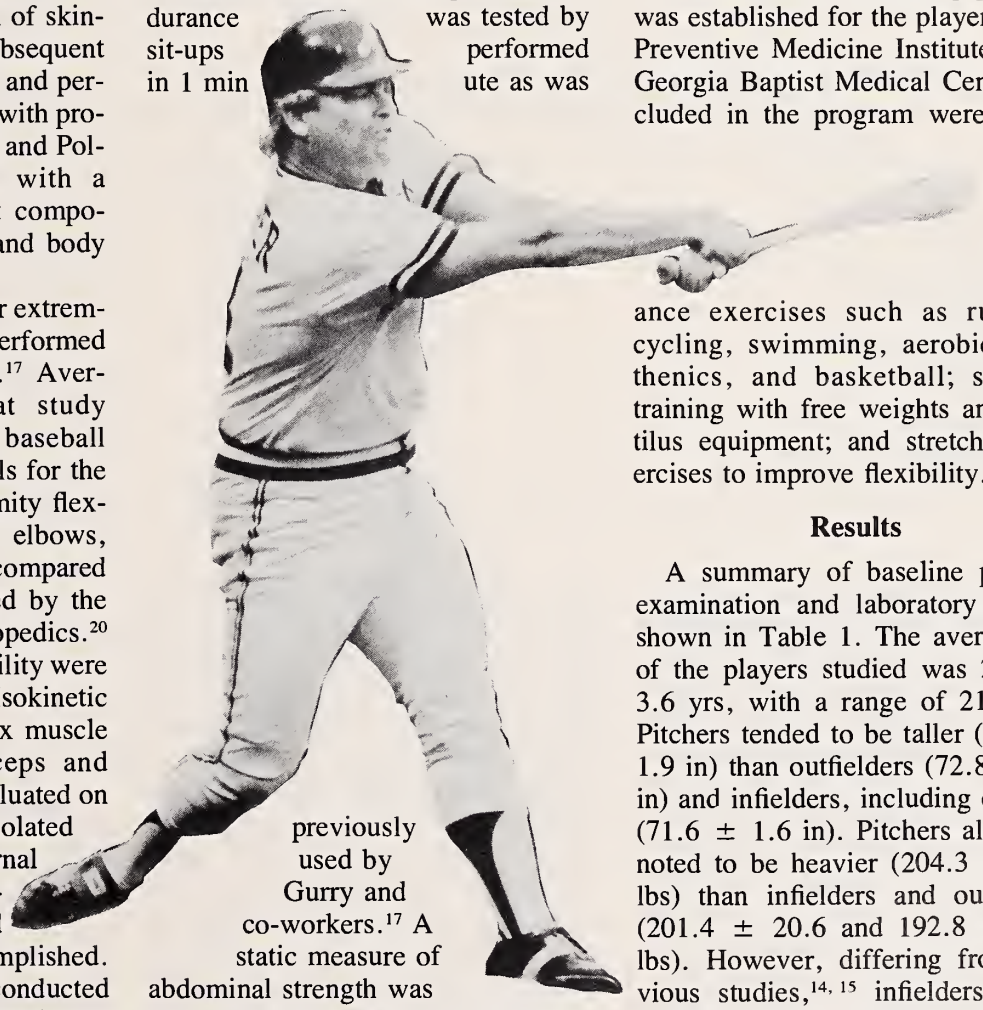
This study involved comprehensive evaluations of 35 members of the Atlanta Braves National League baseball team. The group was comprised of 17 pitchers, 12 infielders (including four catchers) and six outfielders. All physical examinations and testing were performed at the Preventive Medicine Institute of the Georgia Baptist Medical Center, Atlanta, and were completed on a single day for each player. The study period involved the off-season following the 1985 season.

Full history and physical examinations were performed on all players. Specific inquiries concerning coronary risk factors, other lifestyle habits, family history, and cardiovascular disease and off-season conditioning were made. Jenkins Personality Questionnaires[18] were answered

by 29 players. Total fasting cholesterol and HDL lipoprotein fraction levels were performed.

Total body weight and height were measured. Skinfold thickness was measured at seven points: triceps, subscapular, axilla, chest, abdomen, suprailiac, and thigh, using Lange skinfold calipers. Two measures were taken and if they differed by 1mm a third was taken. Summation of skinfold measurements and subsequent calculations of body density and percentage body fat were made with procedures outlined by Jackson and Pollock.[19] Each player met with a dietician to review his diet composition, blood lipid values, and body fat analysis.

Flexibility testing of lower extremities, hips, and trunk were performed as outlined by Gurry et al.[17] Average values noted in that study involving 40 professional baseball players were used as normals for the present study. Upper extremity flexibility involving shoulders, elbows, and wrists was tested and compared to athletic norms established by the American Academy of Orthopedics.[20] A total of 32 points of flexibility were assessed in each player. Isokinetic testing was performed in six muscle groups. Bilateral quadriceps and hamstring strength were evaluated on the Cybex II machine. Isolated testing of the shoulder internal and external rotators bilaterally as well as biceps and triceps bilaterally was accomplished. All test contractions were conducted at a velocity of 60°/sec, repeated three times and averaged. Athletic norms for quadriceps and hamstring strength by body weight (100% of body weight for quads and 60% for hamstrings) have been well established by Davies and others.[21-24] Values have also been developed for external and internal shoulder rotation among various athletic groups[21, 24] (14% of body weight for external rotation and 22% for internal rotation). Norms for biceps and triceps muscle groups have not been as well established. The standards available involved research with Nordic skiers[21] who through repetitive use develop tremendous upper extremity strength not found as a rule in professional baseball players. Therefore, normal values were established within the group of players tested by averaging their measured biceps and triceps strength by body weight to establish normal values (for those tested) of 24% of body weight for both biceps and triceps strength. Abdominal muscle strength and endurance was tested by sit-ups performed in 1 minute as was previously used by Gurry and co-workers.[17] A static measure of abdominal strength was also incorporated as described by Kendall et al.[25] The degree of straight leg lift that could be maintained with a pelvic tilt was graded on a scale of 50-100%. These percentages corresponded inversely with a degree of leg lift ranging from 75° to 10° or less.



Aerobic capacity of all subjects was assessed with a maximal treadmill stress test utilizing the Bruce protocol.[25] Fatigue was the end point for all tests. Expired gas specimens were collected during the last 20 seconds of the test and analyzed on a Beckman oxygen analyzer for oxygen and carbon dioxide content. Minute ventilation and maximal oxygen consumption were calculated using the standard equations.[27]

Each subject was given a typewritten copy of his comprehensive evaluation which included specific instructions concerning diet, lifestyle habits, and fitness. Recommendations for improving areas of deficit in flexibility and strength were made. An off-season conditioning program was established for the players at the Preventive Medicine Institute of the Georgia Baptist Medical Center. Included in the program were endurance exercises such as running, cycling, swimming, aerobic calisthenics, and basketball; strength training with free weights and Nautilus equipment; and stretching exercises to improve flexibility.

Results

A summary of baseline physical examination and laboratory data is shown in Table 1. The average age of the players studied was 28.2 ± 3.6 yrs, with a range of 21 to 38. Pitchers tended to be taller (74.6 ± 1.9 in) than outfielders (72.8 ± 2.9 in) and infielders, including catchers (71.6 ± 1.6 in). Pitchers also were noted to be heavier (204.3 ± 23.5 lbs) than infielders and outfielders (201.4 ± 20.6 and 192.8 ± 22.0 lbs). However, differing from previous studies,[14, 15] infielders in the present study were heavier than outfielders. Systolic blood pressure of ≥140 mmHg was found in seven players (20%). Diastolic blood pressure ≥90 mmHg was noted in six players (17%), with 1 player recorded >100 mmHg (3%). Twenty-five players had fasting cholesterol levels of >180 mg/dl, with 20 players (57%) recording values of >200 mg/dl. Thirty-one percent of the athletes had levels ≥240 mg/dl.

Ten players interviewed were smoking regularly, while 15 players (43%) used chewing tobacco on a regular basis. Twenty-two players drank alcohol in varying amounts.

Table 1 — Baseline Physical Examination and Laboratory Data of Professional Baseball Players (mean ± SD)

Height (inches)	73.3 ± 2.4
Weight (pounds)	201.3 ± 21.7
Systolic blood pressure (mmHg)	130.2 ± 9.9
Diastolic blood pressure (mmHg)	83.4 ± 7.4
Resting heart rate (beats/minute)	65.6 ± 7.8
Fasting serum cholesterol (mg/dl)	212.2 ± 47.0
Fasting serum HDL level (mg/dl)	46.7 ± 10.3

Table 2 — Comparison of Weight and Percentage Body Fat to Other Athletes

	Total Body Weight (lbs)	*Body Fat (%)*
Baseball players	201.3	13.3
Football players[1, 2]	235.4	14.4
—defensive backs	186.6	9.6
—linebackers	224.8	14.0
—offensive linemen	247.7	15.6
Basketball players[3]		
—guards	183.9	10.6
Soccer players[6]	166.5	9.6
Decathlon athletes[11]	186.4	12.8
Speed skaters[12]	160.1	6.8

Personality testing revealed predominantly Type A in 17 players and Type B in 12 players. Gurry and coworkers found predominately Type B personality profiles in their test group.[17] Six players had significant family histories for cardiovascular disease defined as myocardial infarction or cerebrovascular accident in a first degree male relative less than age 50 or female less than age 55. Regular offseason aerobic activity was participated in by 23 players (66%).

Percentage body fat ranged from 6.1 to 25.2, with an average of 13.3 + 4.7. We consider an ideal body fat to be ≤14 percent. Sixty percent of the players were in this category. Thirty-one percent (11 players) had mild to moderate excess in body fat (14-20% body fat), and 3 players (9%) were appreciably overfat with a percentage body fat greater than 20. Pitchers (14.6 ± 4.6%) again compared more closely with infielders (14.0 ± 4.7%), differing from previous studies of professional baseball players.[14, 15, 17] Values for percentage body fat reported by Coleman during the last 1-2 months of the playing season were 11.0 ± 5.0 and 12.6 ± 4.3.[14, 15] Preseason values reported by Gurry et al. averaged 16.2 ± 3.2.[17] The average value of the present study fell between these values. This probably reflects the fact that measurements were taken throughout the offseason. Players measured early in the study were presumably at their leanest weights following the season, while measurements closer to spring training reflected heavier weights in those players. Coleman has also shown that players participating in an in-season strength program can even more significantly reduce percentage body fat when compared to controls.[16] Comparisons of weight and percentage body fat between baseball players and other sports participants are noted in Table 2. Baseball players in this study were generally heavier and greater in percentage body fat when compared to professional basketball guards, soccer players, and Olympic-caliber athletes.[1-3, 6, 11, 12] Basketball centers and forwards were heavier but with much less percentage body fat.[3] Professional football linebackers and linemen as a group were heavier and had a greater percentage of body fat.[1, 2] When compared to the general population of men of their age group, professional baseball players were heavier, but the percentage of body fat was the same.[28]

Flexibility testing revealed an average of 10.2 ± 4.6 areas of deficit. As noted previously by Gurry et al.[17] no appreciable difference in right and left sides were noted. The most common deficit among players in their lower extremities was found in hip rotation. Twenty-eight players (80%) showed deficits of either internal or external rotation, with 24 (69%) deficient in both. Eighty percent (28 players) also showed some deficiency of either trunk flexion or extension. In the upper extremities, the most common deficit was that of shoulder-wrist elevation (29 of 35, 83%). This test involves the subject lying prone with his arms extended above his head. A cane is grasped with both hands and the ability to elevate the cane above the table while maintaining a prone position is assessed. Nine of 17 pitchers showed deficits of elbow extension. This deficit was found in the dominant (throwing) extremity in all cases. In general, pitchers were most flexible in their lower extremities, hips, and trunk (i.e., least number of deficits) and least flexible (as compared to infielders and outfield-

"This study profiles professional baseball players with regard to cardiac and lifestyle risk factors, baseline physiologic and anthropometric measures, flexibility, muscular strength, endurance, and aerobic capacity."

ers) in their upper extremities. Gurry et al. noted similar findings.[17] Overall, outfielders showed the least number of flexibility deficits. Table 3 compares average flexibility deficits among positions. In order to compare players in this study among the group, a percentile ranking was developed. The number of deficits ranged from 0 to 21. The upper tenth percentile had ≤5 deficits. Those in the 50th-90th percentile had 6-11 deficits. The lowest tenth percentile had 17 or more deficits. Three players scored in the upper 10th percentile and three in the lowest tenth. Seventeen ranked in the 50th-90th percentile and 15 in the sub-50th percentile.

A total of 27 players participated in the Cybex evaluations of muscle strength. The average number of total deficits including deficient abdominal strength was 4.0 ± 3.2. No significant differences among positions concerning upper or lower extremity strength deficits were found. The average number of sit-ups in one minute was 44.2 ± 9.4, which was considerably lower than the value of 53 ± 11 reported by Gurry et al.[17] Static abdominal strength measurement placed all subjects in the 80-100% rank. Deficit relates only to a comparison of a player's performance to the normals as outlined. Specific weight lifting performances in the study by Coleman showed pitchers to rank first in lower body strength followed by outfielders and infielders, respectively. Outfielders, however, possessed the greatest upper body strength, with pitchers ranked last.[14] Coleman has also demonstrated that players maintained on an in-season weight-training program significantly increase their strength and are significantly stronger than controls by the end of the season.[16] Percentile rankings similar to those for flexibility were again established. The upper tenth percentile was comprised of players with less than 2 strength deficits (9 players, or 33 percent). Seven players ranked in the 50th-90th percentile (2-5 deficits). Eleven subjects (41 percent) were in sub-50th percentile (6-10 deficits). Two players were in the lowest 10th percentile, with more than 10 deficits.

"Baseball players in this study were generally heavier and greater in percentage body fat when compared to professional basketball guards, soccer players, and Olympic-caliber athletes."

The average $\dot{V}O_2$ maximum as measured at peak effort on a treadmill stress test was 49.7 ± 6.3 ml/kg/min. The average treadmill test time following the Bruce protocol was 15.8 ± 2.1 minutes. (The average maximal oxygen uptake for college men of 48-50 ml/kg/min has been cited.[29]) The study by Coleman reported a value of 50.3 ± 5.6 ml/kg/min, while the Gurry et al. study value was 41.6 ml/kg/min.[14, 17] The latter study group noted their significantly lower value which probably reflects the use of a bicycle ergometer. Typically, this method results in maximal oxygen uptake values 10-15% lower than those obtained on the treadmill as reviewed by Hermansen et al.[30] and McArdle et al.[31] The present study noted no significant difference in $\dot{V}O_2$ max among positions, concurring with results by others.[14, 17] Table 4 compares $\dot{V}O_2$ max values for baseball players with competitors in other sports. As shown, unlike baseball, basketball and football players showed significant positional differences for $\dot{V}O_2$ max values, reflecting their varying aerobic capacities.[1-3]

Three players attended the off-season conditioning program at the Georgia Baptist Medical Center, and one completed the regimen. That player's pre- and post-conditioning results are noted in Tables 5-6. At the time of this writing, the player (a pitcher) ranks among the league's top 10 in strikeouts.

Of 14 players with weight problems (% body fat >14), half lost an

Table 3 — Average Number of Flexibility Deficits for Baseball Players by Position

	Upper Extremity	*Lower Extremity, Trunk and Hips*	*Total*
Pitchers (n = 17)	4.2 ± 2.9	5.8 ± 3.6	10.1 ± 5.3
Infielders (n = 12)	3.6 ± 2.7	7.4 ± 3.3	11.0 ± 4.6
Outfielders (n = 6)	3.3 ± 1.9	5.5 ± 1.4	8.8 ± 2.2
Total (n = 35)	3.9 ± 2.7	6.3 ± 3.2	10.2 ± 4.6

Table 4 — Comparison of $\dot{V}O_2$ Max Values to Other Athletes

	$\dot{V}O_2$ max (ml/kg/min)
Baseball players	49.7
Football players[1, 2]	50.1
—defensive backs	53.1
—linebackers	52.1
—offensive linemen	49.9
Basketball players[3]	
—guards	50.0
—forwards	45.9
—centers	41.9
Soccer players[6]	58.4
Decathlon athletes[11]	57.6

Table 5 — Pre- and Post-Conditioning Data

	10/16/85	2/18/86
Weight (lbs)	190.0	191.0
Fasting serum cholesterol (mg/dl)	171.0	169.0
Fasting serum HDL level (mg/dl)	37.0	37.0
Body fat (%)	15.6	13.1
Treadmill time (min)	14.2	16.0
$\dot{V}o_2$ max (ml/kg/min)	52.9	62.1

Table 6 — Pre- and Post-Conditioning Strength Increase

	% Increase	
	Right	Left
Leg:		
Quadriceps	7	3
Hamstrings	3	31
Shoulder:		
External Rotators	13	53
Internal Rotators	4	15
Arm:		
Triceps	8	26
Biceps	13	12

average of 13 lbs per man after body composition analysis and nutritional counseling. One player, who hadn't lost weight, worked hard on strength training during the off-season. Reassessment of his body composition at the start of the season showed that his percentage body fat had fallen from 19.5 to 12.6 (now within the desirable range). His contract was modified accordingly to avoid an overweight penalty clause.

Discussion

Thirty-five professional baseball players were characterized with regard to coronary risk factors, lifestyle practices, baseline physiologic parameters, and body composition. Flexibility testing and muscle strength and endurance were assessed. Maximal oxygen consumption was determined by use of treadmill stress testing. Recommendations were made concerning diet, lifestyle, and fitness modification. A supervised endurance, flexibility, and strength program was made available to the players during the off-season.

Comparisons were made where possible to previous studies conducted on professional baseball players and other professional and amateur athletes. The group tested was a small and nonrandom sample and therefore no comparative statistical analyses were performed among the test subjects or between groups with which they were compared.

Comprehensive evaluations such as this are long overdue in professional baseball. As noted by Moore, the time is gone when a player can "play himself into shape" during the 6-week period of spring training.[32]

The present study as well as the majority of other studies concerning professional baseball players have been "point in time" collections which provide much needed baseline data for comparison and establishment of norms for the sport. However, in order to optimize performance over a season and ultimately a career, ongoing interval assessments prior to, during, and after the season are needed to appropriately structure fitness programs.

Extensive testing of flexibility and strength variables are useful not only in identifying areas of deficiency but also in guiding both off-season and in-season fitness programs to correct such deficits. Testing of this nature should lead to a reduction in injuries and more efficient rehabilitation of injuries which do occur. Aerobic capacity should not be deemphasized in baseball because it is not a major component of the game. Researchers have suggested that a lower than average aerobic capacity may lead to more fatigue in the latter stages of a game as well as of the season, leading to a decline in performance and possibly increased potential for injury.[14, 16, 17] Repeated assessments are needed again to guide both off-season and in-season aerobic conditioning programs, as well as career-long programs to maintain maximal conditioning. The impressive conditioning results of the one player who adhered to our prescribed program should serve as a model for his colleagues after the completion of the current season.

Maintenance of appropriate percentage body fat both with diet and exercise is essential to overall fitness. Lifestyle changes concerning cardiovascular and other health-related risk factors should not be overlooked.

This study and those previously cited have begun to establish a data base for physical and physiologic parameters for professional baseball players. As this data base increases, more sport-specific testing and normal levels of performance for the sport can be established. Programs can then be designed to best achieve and maintain these levels of performance and enhance not only seasonal but career performances on the field.

Acknowledgements

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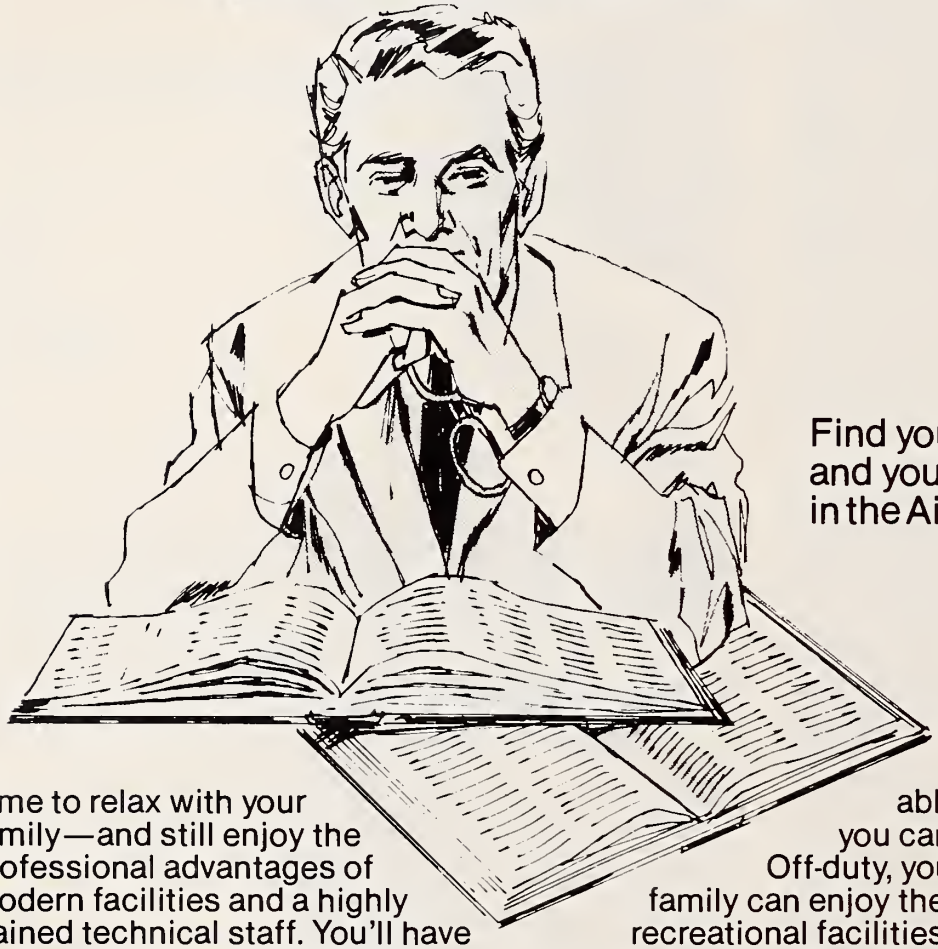
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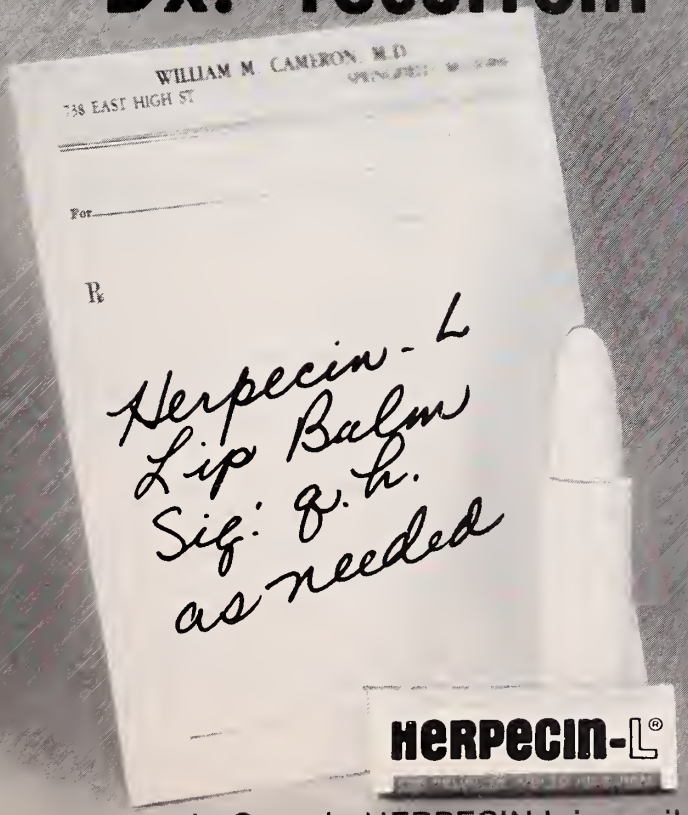
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CLINICAL DECISION MAKING AND LABORATORY DATA: A CALCULATED APPROACH

ALAN S. CLEPPER, M.D.

CLINICAL MEDICINE is characterized by the need to make decisions about diagnosis, prognosis, and treatment — often in the face of considerable uncertainty. To serve its purpose, laboratory information should reduce that uncertainty. Often, there are limits on how much uncertainty *can be* reduced, dictated by physiologic rationale and the technical and diagnostic performance of the laboratory tests to be employed. Also, the extent to which uncertainty *need be* reduced is determined by the benefits and risks inherent in the proposed management. A clinically useful test is one that, albeit indirectly, leads to better patient management results.[1]

"A clinically useful test is one that, albeit indirectly, leads to better patient management."

A diagnosis is generally regarded as a necessary prerequisite to treatment. Medical students are led to believe that clinical diagnosis, like the classical scientific experiment, is an inherently logical inductive-deductive process. Thus, they are encouraged to make a series of unbiased observations (history taking, physical examination, routine testing), then to logically infer a set of diagnostic hypotheses (induction), and after that to test those hypotheses by appropriate investigations (deduction).

This, of course, is not the way in which experienced physicians make diagnoses. Moreover, by emphasizing unbiased observations, it tends to encourage the indiscriminate collection of redundant data. Experienced physicians, like other expert problem-solvers, rarely make unbiased observations, but use a more straightforward hypothesis-then-deduction approach, whereby diagnostic hypotheses are activated almost immediately upon seeing the patient. Once activated, hypotheses are tested by searching for clinical or laboratory clues designed to confirm the more likely diagnoses and exclude the less likely. This process of hypothesis sorting continues until it is considered safe to treat or not to treat.[2]

Laboratory tests should assist the physician in sorting and revising his clinical hypotheses; the process can be viewed as one of assessing our prior or initial probabilities as new information is added. Unfortunately, physicians' estimates of probabilities are sometimes at odds with reality, a situation that is not helped by the constantly expanding knowledge of disease pathophysiology and the diagnostic tools available. In particular, our "knowledge" of the probability relationships between laboratory tests and diseases has often not been well founded, even for the more recently developed tests. This leads to such things as the unfounded initial enthusiasm for CEA and prostatic acid phosphatase assays as case-finding tumor markers, and also the subsequent failure to appreciate the utility of these same tests for monitoring, prognosis assessment, and high prevalence case-finding.[1]

"The decision to do a given test should be made on the assumption that the results will appreciably reduce the uncertainty relating to a given question."

Another way of looking at this is to consider that diagnosis involves two essential steps: the first being the establishment of diagnostic hypotheses, followed by attempts to reduce their number by progressively ruling out specific diseases (in reality, decreasing their likelihood to an acceptable level). This process requires very *sensitive* tests. Such tests, when *normal*, permit the physician to confidently exclude the disease and when *abnormal* serve to strengthen the probabil-

Dr. Clepper is Director of Laboratories, The Medical Center, 710 Center St., P.O. Box 951, Columbus, GA 31994-2299. Send reprint requests to him.

ity of disease. The second step is the pursuit of a strong clinical suspicion. This process requires a very *specific* test. Such a test, when *abnormal,* should essentially confirm the presence of the disease.

Tests or procedures are done when the information available from historical review, physical examination, or previous testing is considered inadequate to answer the questions at hand. The decision to do a given test should be made on the assumption that the results will appreciably reduce the uncertainty relating to a given question. The use of a test to *exclude* a diagnosis should indicate that the physician's best estimate, after a careful evaluation of the patient's problem, is that the diagnosis in question is *possible* but not the most likely. On the other hand, a test to *confirm* a diagnosis should only be used after deciding that the diagnosis in question is *probable.*

This is all straightforward, but it does lead us into a few more (and older) concepts that are also fairly basic but which, in recent years, have been reexamined and restructured into a tool of particular usefulness in clinical diagnostic medicine. This tool is known as Predictive Value Theory.

Let us start with some definitions and then some examples of how these concepts are applied. In essence, Predictive Value Theory is simply a formalization of common sense that should help the physician proceed more effectively toward his goal of diagnosis and appropriate treatment.

There are seven basic concepts that we need to understand:[3]

Clinical Sensitivity: Positivity in disease; the probability that a test result will be abnormal (positive) in the presence of disease.

Sensitivity = True(+) / Total # with disease.

Sensitivity measures how often the test is *positive in disease.*

Sensitivity answers the question: "If the patient has the disease, what is the probability that the test will be abnormal (positive)?"

The greater the *sensitivity,* the lesser the probability of a false negative.

Clinical Specificity: Negativity in health; the probability that a test result will be normal (negative) in the absence of disease.

Specificity = True(−) / Total # without disease.

Specificity measures how often the test is *normal in health.*

Specificity answers the question: "If the patient does not have the disease, what is the probability that the test will be normal (negative)?"

The greater the *specificity,* the lesser the probability of a false positive.

Positive Predictive Value: The probability that disease is present, given an abnormal (positive) test result.

Positive Predictive Value (+)PV = True(+) / Total(+).

When expressed as a percentage, the Positive Predictive Value gives the % of patients with a positive (abnormal) test that are diseased.

(+)PV also expresses the frequency of the disease in question in all patients with positive (abnormal) test results.

(+)PV answers the question: "If the test is abnormal (positive), what is the probability that the patient actually has the disease?"

Negative Predictive Value: The probability that disease is absent given a normal (negative) test.

Negative Predictive Value (−)PV = True(−) / Total(−).

When expressed as a percentage, the Negative Predictive Value gives the % of patients with a negative (normal) test that are nondiseased.

(−)PV also expresses the frequency of nondisease in all patients with a negative (normal) test result.

(−)PV answers the question: "If the test is normal (negative), what is the probability that the patient is normal?"

False Positive Rate: The probability that the test will be abnormal or positive when the disease is not present.

False Positive Rate = [False(+) tests] / [Total Without Disease].

False Positive Rate = [100 − Specificity(%)].

False Negative Rate: The probability that the test will be normal or negative when the disease is present.

False Negative Rate = [False(−) tests] / [Total With Disease].

False Negative Rate = [100 − Sensitivity(%)].

Efficiency of Test: The percentage of patients that are correctly classified as diseased and nondiseased.

Efficiency answers the question: "How many of the patients are correctly classified by the test as having the disease or not having the disease in question?"

Efficiency is a good yardstick by which the diagnostic value of one test can be compared with another.

One thing that must be kept in mind is that both *Predictive Value* and *Efficiency* are functions of *prevalence.* The *higher* the prevalence of disease, the greater the (+)PV; and the *lower* the prevalence of disease, the greater the (−)PV. Also, a sensitive but nonspecific test is more efficient (gives more correct answers) when prevalence is high; and an insensitive specific test is more efficient when prevalence is low.

Thus, the higher the prevalence of disease in the population being studied, the higher the probability of disease in each patient, and therefore the higher will be the Positive Predictive Value. The lower the prevalence of disease, the lower will be the Positive Predictive Value.

When a disease is suspected clinically, abnormal (positive) results are more likely to be truly positive; in asymptomatic individuals, positive results are more likely to be falsely positive. On the other hand, negative results are more likely to be truly negative in asymptomatic individuals than in those in whom disease is suspected clinically.[4]

For example, if the patient is in a CCU, he or she probably belongs to a population with a high prevalence of myocardial infarct. Therefore, a positive CK-MB has a higher predictive value for MI than if it were picked up in a routine admission screen. On the other side of the coin, a negative CK-MB in a CCU patient is much

more likely to be a false negative compared to the routine screen patient.

In applying the predictive value concepts to a clinical situatioin it is useful to work from a basic model that is expressed in Table 1.

A good physician intuitively does an informal risk-benefit analysis with each diagnostic problem and is more accepting of misdiagnosis in some conditions than in others. For some conditions, such as thyrotoxicosis or hypothyroidism, false negatives are less acceptable than false positives; whereas for leukemia and brain and lung cancer, the reverse is true — false positives are less acceptable than false negatives. Physicians place a high value on avoiding false negative errors when dealing with treatable conditions and place a high value on avoiding false positive errors when dealing with potentially lethal conditions for which treatment is risky or relatively ineffective.

To illustrate the application of the predictive value model, let us consider the following set of data obtained from a study in which unselected workers were screened for the presence of COPD using the forced expiratory flow volume (FEV) test. Disease was considered to be present if the person fulfilled the American Lung Association criteria for COPD. A positive test was arbitrarily defined as an FEV <80% of the predicted. The findings are summarized in Table 2.[1]

Table 1. Predictive Value Matrix

Patients	*# With Positive Test*	*# With Negative Test*	*Totals*
# With disease	True(+)	False(−)	Total # with disease
# Without disease	False(+)	True(−)	Total # without disease
Totals	Total(+)	Total(−)	Total patients

Definitions:
Sensitivity = Positivity in disease = True(+) / Total # with disease.
Specificity = Negativity in health = True(−) / Total # without disease.
Positive Predictive Value = True(+) / Total(+).
Negative Predictive Value = True(−) / Total(−).
False Positive Rate = [100 − Specificity(%)].
False Negative Rate = [100 − Sensitivity(%)].
Efficiency of Test = [True(+) + True(−)] / Total patients.

Table 2. Predictive Value of <80% FEV for COPD in 1864 Employees

Patients	*# With Positive Test*	*# With Negative Test*	*Totals*
# With COPD	65 True(+)	256 False(−)	321 with COPD
# Without COPD	134 False(+)	1409 True(−)	1543 without COPD
Totals	199 Total(+)	1665 Total(−)	1864 Total Tested

Sensitivity = True(+) / Total with COPD = 65/321 = 20%
Specificity = True(−) / Total without COPD = 1409/1543 = 91%
(+) Predictive Value = True(+) / Total (+) = 65/199 = 33%
(−) Predictive Value = True(−) / Total (−) = 1409/1665 = 85%
Efficiency of Test = [True(+) + True(−)] / Total Tested = [65+1409] / 1984 = 79%
False Positive Rate = 100 − Specificity(%) = 100−91 = 9%
False Negative Rate = 100 − Sensitivity(%) = 100−20 = 80%

> ***"A test cannot be totally sensitive and specific at the same time. Improved sensitivity is always at the expense of specificity, and vice versa."***

Using the <80% criterion, the FEV is a poor test to *screen* for COPD because of its unacceptable low 20% sensitivity; that is, the test is abnormal in only 20% of COPD cases. From another angle, it has a high false negative rate and misses 80% of the cases. However, the specificity of 91% means that the test would be quite adequate to *confirm* suspected disease; that is, the FEV would be negative in 91% of people without COPD, with a false positive rate of 9%. The efficiency of the test leaves something to be desired, as it misclassified [100−79] or 21% of those tested.

This leads us to another consideration, that is, the criterion for defining an abnormal or positive test. Obviously, the test's sensitivity, and hence its value as a screening test, would be improved by relaxing the criterion for a positive test; e.g., by defining abnormal as an FEV <90%. However, a test cannot be totally sensitive and specific at the same time. Improved sensitivity is always at the expense of specificity, and vice versa.

Ordinarily, we define the normal range of a test as being limited to 2 standard deviations from the mean. However, a critical or cut-off point (or better still, a referent value) thus defined is quite often inappropriate to exclude a disease because it makes the test insensitive, with a high false negative rate. The importance of selecting the right *referent value* is well illustrated in the following examples, using LDH isoenzyme data from CCU patients at The Medical Center. We know that the upper limit of normal of the LD1/LD2 isoenzyme ratio is about 0.70, defined as 2 S.D. beyond the mean, and that increased LD1 in myocardial infarction causes the ratio to increase.

However, if we were to use 0.70, or even 0.80, as the referent value in the diagnosis of myocardial infarction, we would find that while we would have high sensitivity, we would also have a high false positive rate and a low (+) Predictive Value (see Table 3). Traditionally, we have used the so-called "flip" of the LD1/LD2 ratio (i.e., a ratio =>1) as the referent

Table 3. Predictive Value of LD1/LD2 >0.80 for Myocardial Infarction

Patients	*# With LD1/LD2 Ratio >0.80*	*# With LD1/LD2 Ratio <=0.80*	*Totals*
M.I. Present	69 True(+)	3 False(−)	72 Total with M.I.
M.I. Absent	17 False(+)	91 True(−)	108 Total without M.I.
Totals	86 Total(+)	94 Total(−)	180 Total Patients

Sensitivity = True(+) / Total with M.I. = 69/72 = 95.8%
Specificity = True(−) / Total without M.I. = 91/108 = 84.3%
(+)Predictive Value = True(+) / Total(+) = 69/86 = 80.2%
(−)Predictive Value = True(−) / Total(−) = 91/94 = 96.8%
Efficiency = [True(+) + True(−)] / Total Patients = (69+91) / 180 = 88.9%
False Positive Rate = (100 − Specificity) = (100−84.3) = 15.7%
False Negative Rate = (100 − Sensitivity) = (100−95.8) = 4.2%

Table 4. Predictive Value of LD1/LD2 >0.90 for Myocardial Infarction

Patients	*# With LD1/LD2 Ratio >0.90*	*# With LD1/LD2 Ratio <=0.90*	*Totals*
M.I. Present	63 True(+)	9 False(−)	72 Total with M.I.
M.I. Absent	6 False(+)	102 True(−)	108 Total without M.I.
Totals	69 Total(+)	111 Total(−)	180 Total Patients

Sensitivity = True(+) / Total with M.I. = 63/72 = 87.5%
Specificity = True(−) / Total without M.I. = 102/108 = 94.4%
(+)Predictive Value = True(+) / Total(+) = 63/69 = 91.3%
(−)Predictive Value = True(−) / Total(−) = 102/111 = 91.9%
Efficiency = [True(+) + True(−)] / Total Patients = (63+102) / 180 = 91.7%
False Positive Rate = (100 − Specificity) = (100−94.4) = 5.6%
False Negative Rate = (100 − Sensitivity) = (100−87.5) = 12.5%

Table 5. Predictive Value of LD1/LD2 = >1.0 for Myocardial Infarction

Patients	*# With LD1/LD2 Radio =>1.0*	*# With LD1/LD2 Ratio <1.0*	*Totals*
M.I. Present	55 True(+)	17 False(−)	72 Total with M.I.
M.I. Absent	3 False(+)	105 True(−)	108 Total without M.I.
Totals	58 Total(+)	122 Total(−)	180 Total Patients

Sensitivity = True(+) / Total with M.I. = 49/72 = 76.4%
Specificity = True(−) / Total without M.I. = 105/108 = 97.2%
(+)Predictive Value = True(+) / Total(+) = 55/58 = 94.8%
(−)Predictive Value = True(−) / Total(−) = 105/122 = 86.1%
Efficiency = [True(+) + True(−)] / Total Patients = (55+105) / 180 = 88.9%
False Positive Rate = (100 − Specificity) = (100 − 97.2) = 2.8%
False Negative Rate = (100 − Sensitivity) = (100 − 76.4) = 23.6%

value in the diagnosis of myocardial infarction. With the application of predictive value theory, it can be clearly shown that the use of =>1 as the referent value for the ratio is even more inappropriate than 0.80, in that the LD1/LD2 ratio test, while then being highly specific, also becomes insensitive, with a high false negative rate (see Table 5). This is precisely the opposite of what one desires in order to fulfill the purpose of the test in this setting, which is to *exclude* the diagnosis of myocardial infarction. Myocardial infarction is a treatable condition, and the consequences of missing the diagnosis can be serious; thus, we wish to minimize the false negative rate.

These concepts are well illustrated in the following application of the predictive value model. The data came from 180 patients admitted to the Coronary Intensive Care Unit of The Medical Center over the last 2½ years. The final clinical discharge diagnosis was accepted in classifying the patients, all of whom had sufficient CK-MB and LDH isoenzyme test data to establish a pattern.

The data were examined at three different referent values of the LD1/LD2 ratio: 0.80 (Table 3), 0.90 (Table 4), and 1.0 (Table 5).

Notice how the Specificity, Efficiency, and the (+)PV of the test improves in Table 4, while maintaining high Sensitivity and (−)PV, with LD1/LD2 Ratio >0.90 as the referent value:

Now, observe the marked loss of sensitivity and increase in the false negative rate of the test when we use an LD1/LD2 Ratio of >1.0 as the referent value. As shown in Table 5, the test efficiency is no better than that using 0.80 as the referent value.

One additional observation worthy of note is that there was a distinct relationship between the LD1/LD2 ratio (and also the magnitude of the CK-MB level) and the patient's age: the mean age of those patients with a ratio <1.0 was 68 years, while for those with a ratio =>1.0 the mean age was 59 years. This may relate to the amount of myocardial muscle mass and its vascularity, both of which would predictably be decreased in the older age group, leading to smaller elevations of LD1 (and CK-MB) with infarction.

We could carry these concepts further and show their applicability to combination test models such as CK-MB plus LD1/LD2, as well as how the false positive and true positive rates at various referent values can be used to generate so-called Receiver-Operator-Characteristic (ROC) curves useful in optimizing diagnostic efficiency of a test. Space (and probably your forebearance) do not allow for that now. However, these examples do illustrate how the simple application of the basic concepts of Predictive Value Theory can be helpful in the more effective use of laboratory information to reduce uncertainty in diagnosis.

"A good physician intuitively does an informal risk-benefit analysis with each diagnostic problem and is more accepting of misdiagnosis in some conditions than in others."

Although close observation and intuition might eventually lead us to the same conclusions, the utility of the systematic application of these principles to clearly refine and improve our diagnostic capabilities should be apparent from this study. Virtually all new procedures in laboratory and clinical medicine are being subjected to a predictive value analysis as a matter of course. As old procedures are subjected to the same scrutiny, we will most likely be reminded again and again of one of Will Rogers' many poignant truisms: "It ain't so much what we don't know that causes trouble, as what we 'know' that ain't true."

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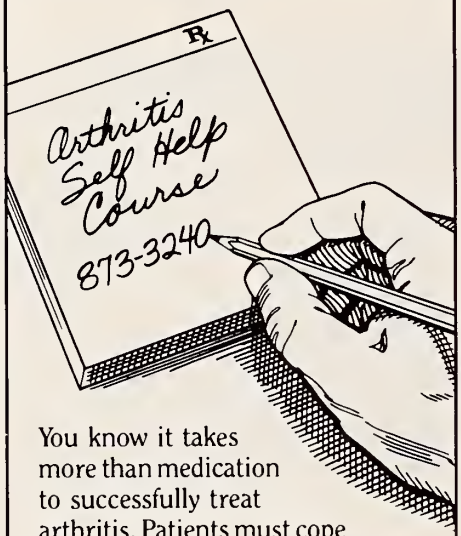
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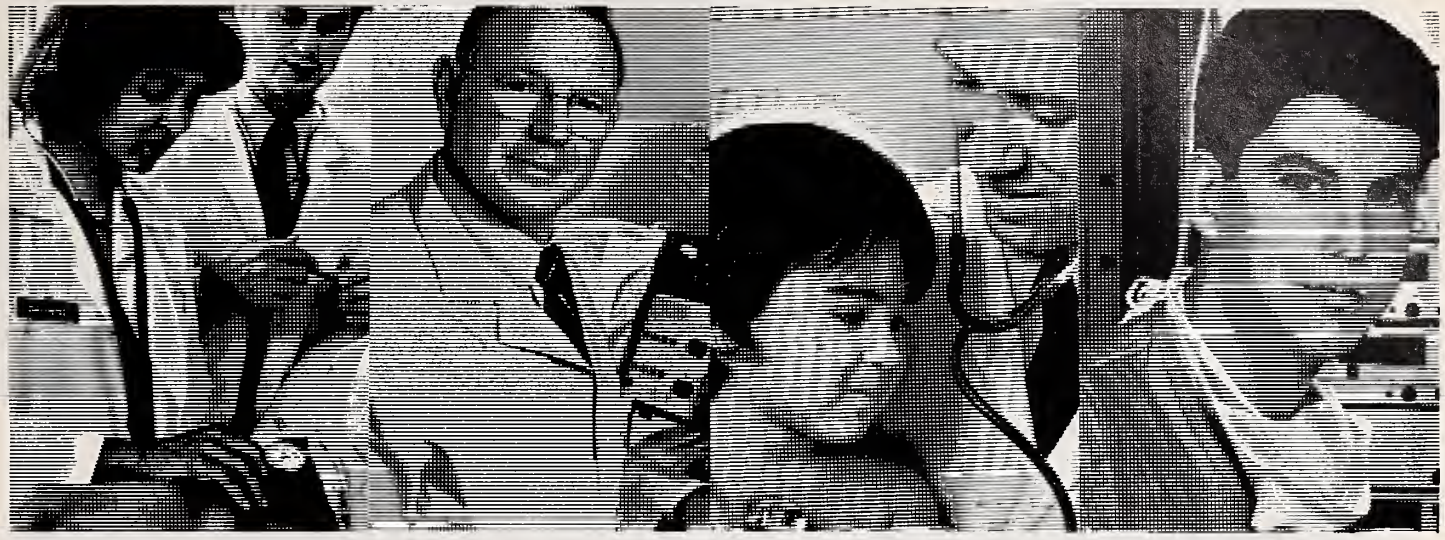
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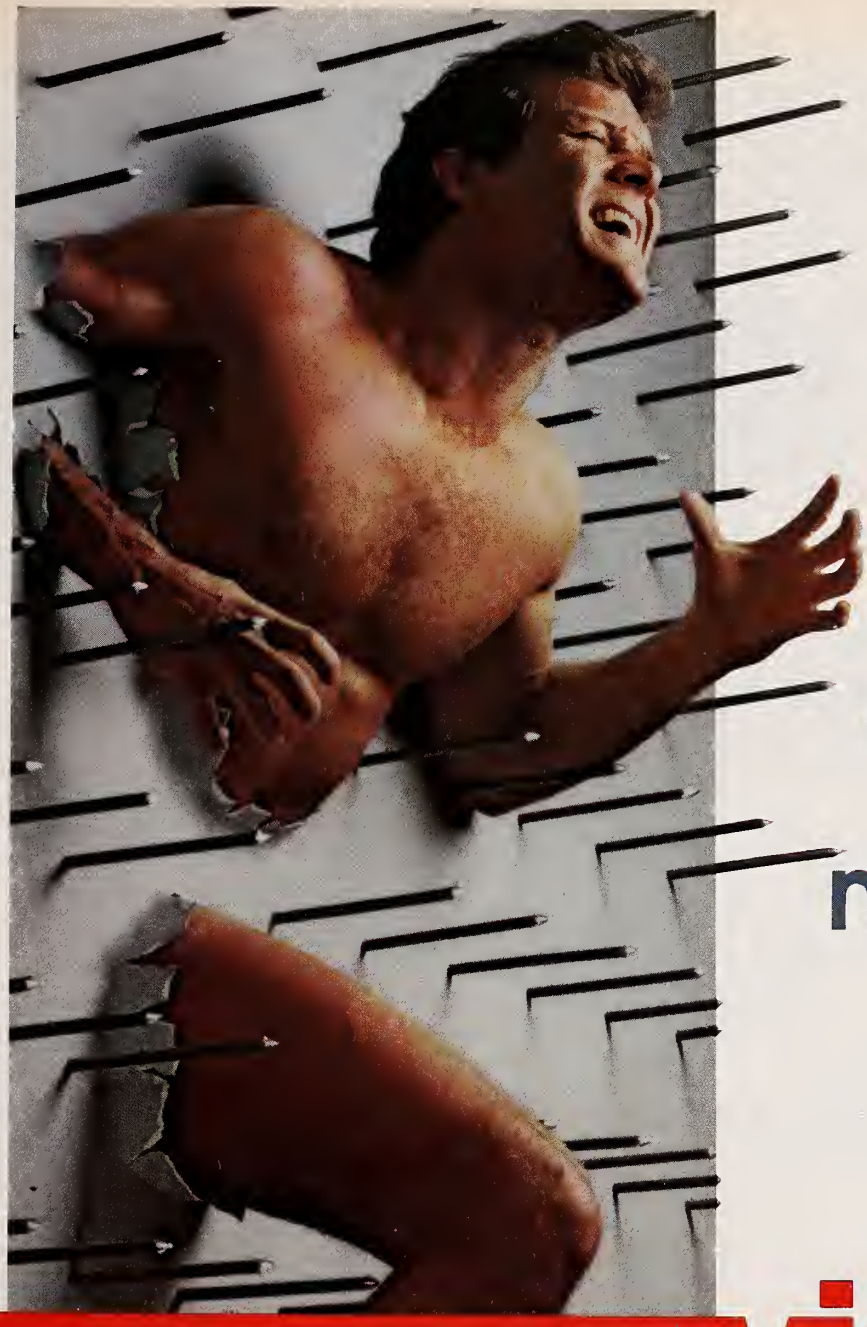
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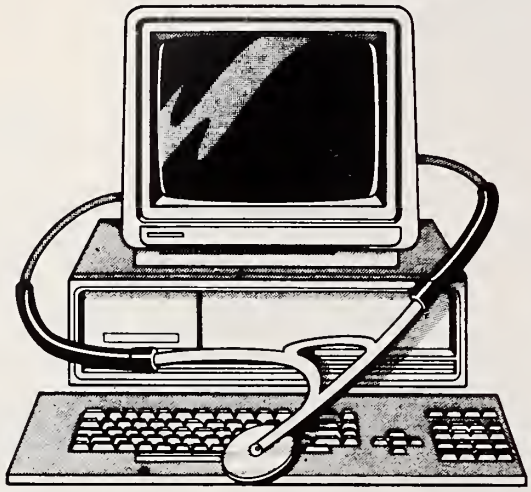
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Adult Soft Tissue Sarcomas

John Duttenhaver, M.D.

"Aggressive operative therapy still remains the primary therapy of choice for most patients with soft tissue sarcoma."

BENIGN AND MALIGNANT soft tissue tumors may be found in any part of the body, resulting in a low accuracy of clinical diagnosis. The diagnosis of malignancy in a locally recurrent, large fungating, or ulcerating tumor is not difficult; the diagnosis of small innocuous lumps in soft tissue is more complex. To be on the safe side, almost all soft tissue masses should be considered malignant. This approach will ensure adequate treatment of both benign and malignant tumors.

Radiographic studies can be helpful in the workup of soft tissue masses in order to define the limits of invasion of the tumor. A CAT scan or MRI scan can suggest necrosis or invasion of the neurovascular bundle or bone. In selected cases where vascular invasion is suspected, an arteriogram is useful in planning surgery.

If the tumor is small, excise it completely. If it is so large that complete en bloc excision is difficult or impossible, an adequate wedge biopsy is recommended. Occasionally, the pathologist is comfortable making a frozen section diagnosis but will also usually require permanent sections. Aspiration cytology is acceptable if the pathologist has experience in this method. The patient will not be injured by a reasonable delay of 1 to 2 weeks for an in-depth study of the biopsy and for consultation to ensure accurate diagnosis.

A soft tissue sarcoma is histologically classified according to the normal tissue it is thought to originate from. Whether the tumor actually originated from the normal tissue type, however, is highly conjectural. Thus, all classifications should be accepted with some caution. Regardless of the histologic classification, the biologic behavior is most closely correlated with tumor grade. A grading system is based on the histologic type, presence of necrosis, and mitotic index. There is no universally accepted staging system which can accurately define the prognosis for any given tumor. This has led to a proliferation of staging systems from a multitude of institutions. The American Joint Committee on Cancer TNM staging system should be used by most physicians.

Treatment of adult soft tissue sarcomas requires a multidisciplinary approach involving cooperation among surgeons, radiation oncologists, medical oncologists, nurses, and rehabilitation personnel. Adequate wide excision is the treatment of choice for all patients with soft tissue sarcomas. Recent examination of limb-

Dr. Duttenhaver is in the Department of Radiation Oncology, Memorial Medical Center, P.O. Box 23089, Savannah, GA 31403. Send reprint requests to him.

sparing treatment has been shown to provide an alternative to amputation for most patients with extremity sarcomas. For patients with bone or neurovascular invasion, amputation is still indicated.

"Regardless of the histologic classification, the biologic behavior is most closely correlated with tumor grade."

A well differentiated Grade I tumor has a better prognosis and a lower incidence of metastasis than a poorly differentiated tumor. Since all sarcomas spread by infiltration of the surrounding muscle and connective tissues, margins around saracomas must be kept generous in order to decrease the incidence of local failure. In areas where margins must be tight, such as in the retroperitoneum or in an extremity close to a neurovascular bundle, surgical clips should be left to provide a target for the radiation oncologist. An occasional unresectable sarcoma can be rendered resectable by the use of preoperative radiation therapy. Doses in the range of 4500 to 5500 rads are necessary and are associated with some slight increase in delayed wound healing and postoperative infection.

No firm conclusions can be drawn from the data in the literature regarding the role of adjuvant chemotherapy in soft tissue sarcomas. Data from the National Cancer Institute shows an improvement in survival of patients with extremity sarcomas (but not central body sarcomas) who receive doxorubicin, cyclophosphamide and high dose methotrexate. However, other institutions have not been able to confirm these results. Chemotherapy for high grade sarcomas probably should not be used in an adjuvant setting outside the confines of a randomized clinical trial.

Any patient with a suspected soft tissue sarcoma should have a proper histologic diagnosis. Based on this diagnosis and the location of the tumor, a proper therapeutic approach should be mapped out. Aggressive operative therapy still remains the primary therapy of choice for most patients with soft tissue sarcoma. Adjuvant irradiation can be useful in decreasing local failures in patients with extremity sarcomas, where limb sparing treatment is attempted, and in the retroperitoneal region where margins are always tight. Except in unusual circumstances, adjuvant chemotherapy should not be used outside the confines of a randomized clinical trial.

"Except in unusual circumstances, adjuvant chemotherapy should not be used outside the confines of a randomized clinical trial."

Pediatric Cardiac Rehabilitation: Physiologic Benefits

Ian Balfour, M.D., Ami Drimmer, Ph.D., Soraya Nouri, M.D.

Introduction

ADVANCES IN the surgical care of children with complex congenital heart defects have resulted in increasing numbers of these children being able to survive to adulthood. With the increase in the quantity of survivors, more consideration has been given to the quality of their lives. Congenital heart lesions affect not only the growth, physical development, and functional capacity of children, but also their psychosocial development. Cardiac defects place limitations on the child's level of physical activity and ability to interact with other children and the environment.[1, 2, 3] Parental attitudes are also important. A child's psychologic adjustment to a chronic disease and level of anxiety have been shown to be determined primarily by maternal anxiety and pampering, rather than by the degree of incapacitation caused by the illness.[1] Inappropriate and excessive parental anxiety may therefore interfere with the afflicted child's psychosocial development and the functioning of the family unit.

From the Department of Pediatrics, St. Louis University Medical Center, 1465 S. Grand Blvd., St. Louis, MO 63104. Send reprint requests to Dr. Balfour.

This paper was sponsored by the Georgia Affiliate of the American Heart Association.

Rehabilitation can improve cardiovascular fitness and functional capacity and by demonstrating to the child and the parents his or her ability to exercise safely can prevent or lessen the psychologic effects of cardiac disease.[4] With longer survival, patients with congenital heart disease will live to an age when they become susceptible to developing coronary artery disease. Cardiac rehabilitation is a means by which they may acquire the knowledge and habits that may help to prevent or delay the development of atherosclerotic cardiovascular disease.

The Pediatric Cardiac Rehabilitation Program developed by Cardinal Glennon Children's Hospital (CGCH) and the Cardiovascular Fitness and Rehabilitation Center (CFRC) of St. Louis University combines education of parents and children with exercise therapy for the children. The goals of our program are similar to those of the American College of Cardiology:[5]

1. To help the individual attain optimal physiologic and psychologic functioning.
2. To reverse the adverse physiologic effects of deconditioning resulting from a sedentary lifestyle.
3. To prepare the patient and his/her family for a lifestyle that may reduce the risk of coronary heart disease and hypertensive cardiovascular disease. (This will involve avoidance of smoking and control of blood pressure, diabetes mellitus, lipid disorders and emotional stress. It will also involve educating the patient and family about cardiovascular disease and the importance of a program of regular physical activity.)
4. To reduce the emotional disorders frequently accompanying serious and chronic health disorders.
5. To reduce the cost of health care by diminishing physical and psychological disability and the need for medical treatment.

Physiology

The caradiovascular, respiratory, and musculo-skeletal systems are the primary systems involved in exercise. In clinical practice, the limiting factor in the exercise capability of cardiac patients is their ability to increase cardiac output during exercise. The increased output is needed to deliver an adequate oxygen supply to the exercising muscles and to remove from them carbon dioxide and other products of metabolism. The exercising muscles initially utilize anaerobic pathways to obtain immediate release of energy. When a steady state of exercise has been achieved, the aerobic pathway comes into play.[6] If the intensity of exercise increases, e.g., as in a graded exercise

test, a point (the anaerobic threshold) will be reached at which the oxygen needs of the excerising skeletal muscles cannot be met by aerobic metabolism (demand exceeds supply). Maximal aerobic capacity is determined by maximal cardiac output and the ability of the exercising muscles to extract oxygen from the blood. Once the anaerobic threshold has been crossed, energy is supplied increasingly by anaerobic metabolism and this results in the accumulation of lactic acid and the increased production of carbon dioxide. Muscle fatigue coincides with the depletion of intra-cellular glycogen stores and the build-up of intra-cellular lactic acid.[6]

" "A review of the beneficial physiologic changes that may be induced by exercise. " "

A lack of exercise results in poor conditioning, and the aerobic pathways of skeletal muscles function less efficiently than in the conditioned state. Less oxygen is extracted from the blood by the mitochondriae of the muscle fiber and less energy is released by enzymatic pathways in the poorly conditioned subject.[7]

Respiration increases during exercise to meet the increased demand for oxygen uptake and carbon dioxide excretion. In the absence of lung disease, the respiratory system is usually functioning at only 67% of its maximal capacity at maximal exercise.[7] Since the cardiovascular system and skeletal muscles are the usual limiting factors in the performance of exercise, the primary goal of exercise therapy during cardiac rehabilitation is to improve cardiac and skeletal muscle function, i.e., to improve maximal aerobic capacity.

There are two types of exercise: *isometric* (muscle fibre length is unchanged even while tension increases), and *dynamic* (muscle fibres alternately shorten and lengthen during exercise). For the purpose of conditioning cardiac patients, dynamic exercise (walking, jogging, swimming) is the predominant mode of exercise used as it is more effective in improving cardiac output and cardiovascular efficiency than isometric exercise. Dynamic exercise places less strain on the heart than isometric exercise, as it does not cause a significant increase in afterload. The physiologic changes induced by exercise depend upon the subjects ages, their prior state of fitness, and the length and intensity of their training.

The physiologic benefits of exercise training to the cardiovascular system are both cardiac and extra-cardiac. The effect of training on myocardial contractility is unclear. Studies on normal subjects have provided conflicting results, probably because of the differing ages of the subjects, differing techniques of training, and methods of assessing ventricular function utilized.[9] Animal studies have suggested that chronic dynamic exercise improves cardiac function.

" "Dynamic exercise places less strain on the heart than isometric exercise, as it does not cause a significant increase in afterload. " "

These conclusions cannot be extrapolated to humans because of species differences. Many animal studies were done on isolated papillary muscles, rather than on whole heart preparations.[9, 10] Resting heart rate and heart rate at submaximal exercise are reduced after training, while maximal heart rate is unchanged. Left ventricular resting end-diastolic and end-systolic volumes are increased. End-diastolic volume during upright exercise tends to be increased after training. End-systolic volume during

upright exercise does not seem to be changed significantly by training. The trained subject will, however, have a greater stroke volume during exercise because of the increased end-diastolic volume.[11, 12] Myocardial perfusion (as assessed by the diastolic pressure time index) is improved after training.[13]

"Less oxygen is extracted from the blood by the mitochondriae of the muscle fiber and less energy is released by enzymatic pathways in the poorly conditioned subject."

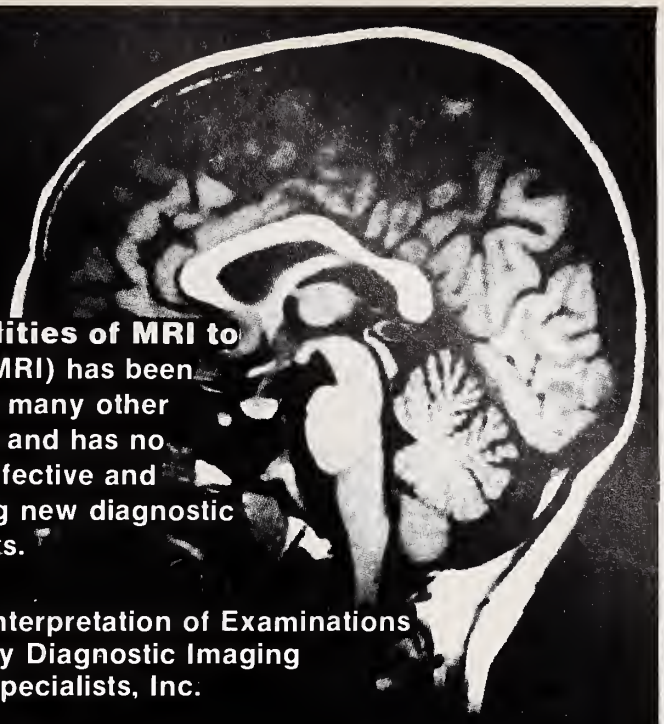
Experimental studies in rats have suggested that exercise training may increase the capillary to muscle fiber ratio in cardiac tissue of young animals as a result of the new capillary formation. There is also evidence from animal studies that the diameter of coronary vessels may increase with training.[9, 14] The physiologic importance of the changes in the myocardial vasculature is not known at this time. Extra-cardiac changes that occur include decreased peripheral resistance (afterload) and lower circulating catecholamine levels.[10] The combined effect of these physiologic adaptations is that maximal cardiac output during exercise is increased after training.[8, 10] Changes which occur in skeletal muscle with endurance training result is an increase in the ability of the trained muscle to extract oxygen from blood so the A-VO_2 (arterio-venous oxygen difference) increases after training. Endurance training also results in an increase in the number and size of the mitochondria in the trained muscle. The activity of enzymes involved in pathways, such as the citric acid cycle, increases. These changes result in an increased ability to oxidize energy substrates (free fatty acids, blood glucose, and muscle glycogen). At the same time, however, lower levels of lactic acid are produced at any given level of submaximal exercise in the trained as compared to the untrained state.[7]

This article has reviewed some of the beneficial physiologic changes that may be induced by exercise. A subsequent report will review the exercise prescription for pediatric cardiac rehabilitation.

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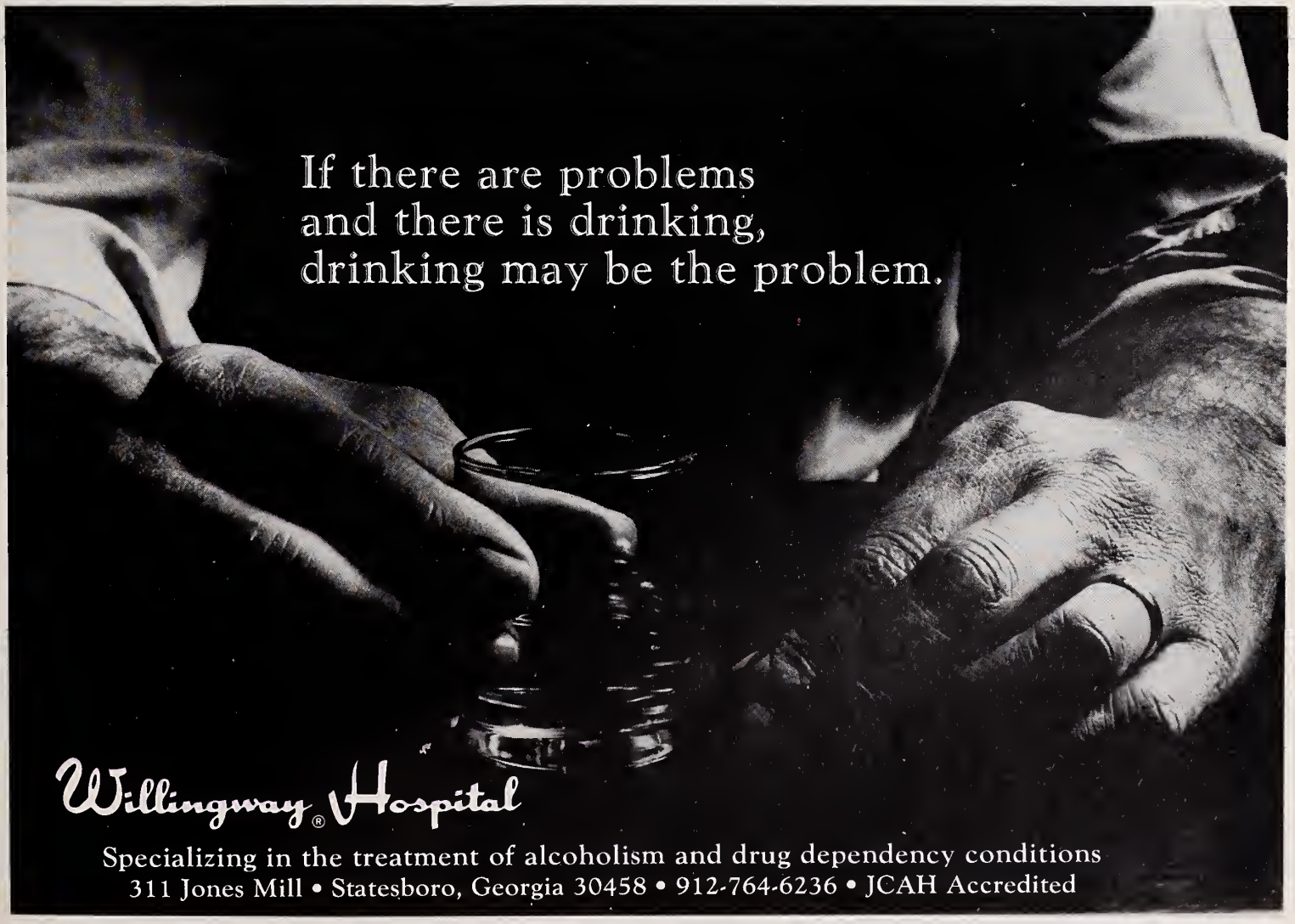
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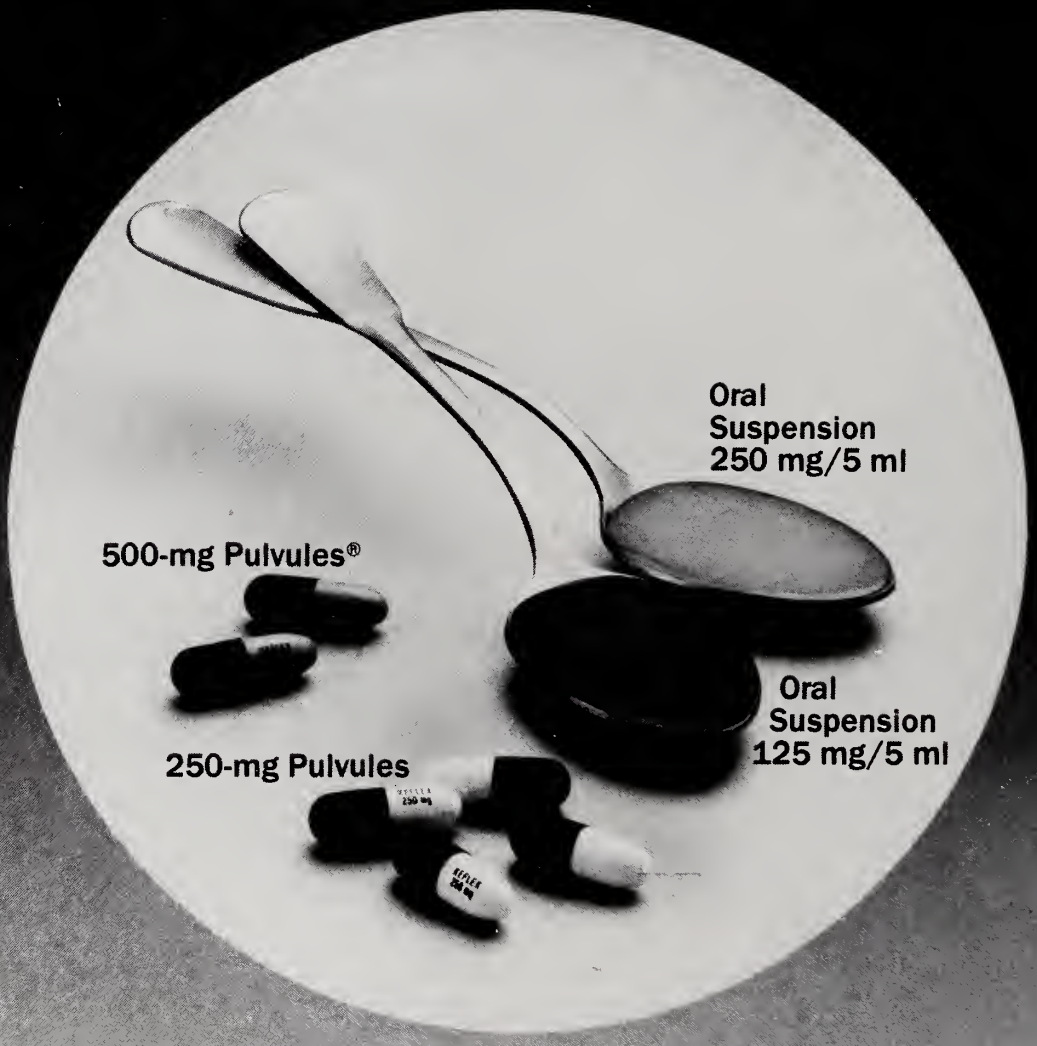
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PERSONALS

First District

Curtis G. Hames Sr., M.D., of Claxton, has been named recipient of the Claxton-Evans County Civic Award, a special recognition bestowed upon individuals who have demonstrated excellence in service to their community, church, and state.

Obstetrician-gynecologist **Sidney R. Washington, III, M.D.,** recently joined the Bulloch Memorial Hospital Medical Staff in Statesboro. He was previously affiliated with Orlando Regional Medical Center in Florida.

Third District

John Marshall, M.D., has been assigned to the Plains Primary Health Care Center by the National Health Service Corps. Dr. Marshall resides in Americus and is also affiliated with Sumter Regional Hospital.

Fifth District

David G. Tinkelman, M.D., of Atlanta, received one of the American Lung Association of Georgia's highest honors, "Professional Of The Year" at the Association's annual meeting in Savannah. This award is presented annually in recognition of outstanding medical professional service or research related to the objectives of the Lung Association.

Sixth District

Charles David Hitson, M.D., of Griffin, has opened a practice in internal medicine. He is a recent graduate of the Medical College of Georgia.

Seventh District

Internist/pulmonologist, **Buford G. Harbin, M.D.,** of Rome, was elected president of the Floyd Medical Center staff.





(Top photo): David G. Tinkelman, M.D., receives the American Lung Association of Georgia's (ALA of GA) "Professional of the Year" award from Lois T. Ellison, M.D., the Association's national president. (Bottom photo): Philip R. Saleeby, M.D., receives the ALA of GA's "Board Member of the Year" Award from Dr. Lois Ellison as his wife, Mae, looks on.



Drayton M. Sanders, M.D., (R) receives the presidential gavel from American Lung Association of Georgia's president Nesbit B. Shearhouse. Dr. Sanders was recently elected president of the Association.

Drayton M. Sanders, M.D., of Dalton, has been elected president of the American Lung Association of Georgia at the Association's recent annual meeting in Savannah. He practices pulmonary medicine at Hamilton Memorial Hospital, serves on the Executive Committee of the Georgia Thoracic Society, and is a past medical director of the Georgia Society of Respiratory Therapists.

Eighth District

Philip R. Saleeby, M.D., of Brunswick was named the American Lung Association of Georgia's "Board Member of the Year" at the Association's annual meeting recently. This award is given to the state board member who has provided an outstanding involvement in Lung Association activities in gifts of time, energy, and quality of participation.

Ninth District

John W. Acree, M.D., announced his retirement after 31 years of general practice in Hiawassee. Dr. Acree attended West Georgia College, served in the U.S. Army, and returned to enter Medical School at the Medical College of Georgia, graduating in 1953.

Dr. Acree has served as Chief of Medical Staff at Towns County Hospital, on numerous hospital committees, and was instrumental in helping Towns County Hospital expand in 1958, adding a nursing home and major renovations and expansions after a fire in 1967, and most recently has had named in his honor, The John W. Acree Resources Center, a community outreach program of Towns County Hospital.

E. A. Roper, Jr., M.D., a native of Jasper, has returned to Pickens and Cherokee Counties to practice internal medicine and pulmonary medicine.

DEATHS

Abraham H. Center, M.D.

Abraham H. Center, a psychiatrist from Savannah, died last May at the age of 78.

Dr. Center received his degree in medicine from the University of Georgia, magna cum laude, in 1933. He interned in New York City hospitals for 2 years. He practiced psychiatry in several Veterans Administration hospitals from 1939-1942. He also practiced psychiatry in the United States Army from 1942-1946 and began his private practice in Savannah in 1946.

Dr. Center was one of the first psyschiatrists in Savannah, being preceded only by Dr. James Craig, who together with Dr. Center opened the first psychiatric unit, the St. James Ward at St. Joseph's Hospital. He was also instrumental in the development and opening of the psychiatric unit at Memorial Medical Center, Clark Pavilion. He was a pioneer in bringing respect and dignity to his profession.

Other honors and achievements include certification by the American Board of Psychiatary and Neurology in 1947. Dr. Center became a Fellow of the American Psychiataric Association in 1958 and a life Fellow in 1975. He was also a member of several other professional medical associations. He was past chief of staff at St. Joseph's Hospital and Charter Broad Oaks Hospital and an honorary staff advisor at Hunter Army Air Field. He was also instrumental in the creation of the Mental Health Clinic in Savannah.

Surviving are his wife, three sons, a sister, and two grandsons.

Edgar J. Filson, M.D.

WHEREAS, Edgar J. Filson was a member and loyal supporter of the Georgia Medical Society during his nearly 20 years in Savannah, and served this organization well in various capacities including a term as its Vice President, and

WHEREAS, Dr. Filson achieved

distinction and reflected credit upon this organization by his many accomplishments and seravices including Fellowship in the American College of Radiology, the American Roentgen Ray Society and recognition of a Diplomate of the American Board of Radiology; as Chief of Staff at Candler General Hospital and Chairman of its Radiology Department; as Chairman of the Board of Savannah Young Peoples Theater; as Flotilla Commander of the Coast Guard Auxiliary; as Commodore of the Savannah Yacht Club; as Chairman of the St. James Catholic Church Parish Council; and in service as a flight surgeon in the U.S. Navy and

WHEREAS, more fundamentally he was known as a good friend, a good husband, a good father and a good citizen, now therefore be it

RESOLVED that this document express the sympathy of the members of the Georgia Medical Society to his family, and our sense of sorrow at our loss at his death. Let it express our gratitude for his service, and our pleasure in his friendship. Let a copy of this document be incorporated into the minutes of this Society as an additional expression of our respect and affection for this remarkable man.

John C. Ivey, M.D.

John C. Ivey, of Meansville, died of pneumonia at the age of 85. Dr. Ivey had been a general practitioner, surgeon, and obstetrician in Atlanta for 50 years and received a plaque as a member of the 50 Year Club of American Medicine.

Dr. Ivey received his medical degree from Emory University School of Medicine and interned at Grady Hospital. Dr. Ivey was a Fellow of the Southeastern Surgical Congress and also belonged to the Atlanta, Georgia, Fulton County, and American Medical Associations, the International College of Surgeons, and the Silver Spurs Club. He is survived by his daughter, brother, and two sisters.

James T. King, Sr., M.D.

James T. King, Sr., an otolaryngologist from Atlanta, died at the age of 74. At various times, Dr. King was a staff member at nine local hospitals, chief of staff at Atlanta Hospital in 1971-72, and an assistant professor at Emory University.

Dr. King graduated from Emory and the Medical College of Georgia, and served in the Army Air Corps during World War II, reaching the rank of lieutenant colonel. Dr. King was president of the Georgia Society of Ophthalmology and Otolaryngology in 1964-65; a founding member of the Georgia Foundation of Otolaryngology; and also a member of the Georgia, Fulton County, Southern, and American Medical Associations. He is survived by his wife and two children.

Thomas A. McGoldrick, M.D.

Internal medicine specialist Thomas A. McGoldrick, of Savannah, died last May at the age of 71.

Dr. McGoldrick received his medical degree from Harvard University Medical School in 1939. He began his internship at Belleview in New York City as the clouds of World War II were gathering. In early 1942, having yet to complete his required period of training for certification, Dr. McGoldrick volunteered in the Regular Navy Medical Corps as a Flight Surgeon. Following several years of meritorious naval duty, he completed his military assignment as a Medical Officer aboard the aircraft carrier, *Antietam* in the western Pacific.

After an honorable discharge, Dr. Goldrick returned to civilian life to complete his studies. He then moved to Savannah in 1948 and opened his internal medicine practice. He served the old Downtown Free Medical Clinics, the Tuberculosis Program, and as President of the Georgia Medical Society. He participated in many unpopular issues for the benefit of his community. He was in the group of leaders who fought for fluoridation of the water supply, for the distribution of the polio vaccine, for the new county hospital (Memorial Medical Center) and St. Joseph's Hospital, all controversial issues of his day.

Dr. McGoldrick is survived by his wife and seven children.

John C. Reedy, Sr.

John C. Reedy, Sr., of Atlanta, died June 26 at the age of 40 attempting to climb a 17,000 foot Andean peak in Peru.

Dr. Reedy was a pediatric anesthesiologist at Scottish Rite Children's Hospital. He was a volunteer for a well known U.S. non-profit organization, Interplast, Inc., of Palo Alto, Calif. The group's doctors and nurses volunteer to go to South America and perform free reconstructive surgery on children suffering from congenital birth defects. He had visited Peru, Honduras, and Equador with other Interplast volunteers during the past 2 years.

Dr. Reedy graduated from Notre Dame University with a degree in philosophy in 1966. Thereafter, he entered the Navy as a recruit and was on active duty during summer months in medical school. After graduation from Emory University School of Medicine in 1970, he returned to the Navy for 3 years as a doctor and officer, retiring with the rank of lieutenant commander.

Dr. Reedy is survived by his wife, a son, two daughters, his parents, a brother, and three sisters.

QUOTES

You may not realize it when it happens, but a kick in the teeth may be the best thing in the world for you.
WALT DISNEY

Money is as money does. If it doesn't, it isn't.
EDWARD SMITH



MAG's Resident Delegation to the AMA — from left to right: Regina Benjamin, M.D., Macon; Steven Wilson, M.D., Columbus; K. Kramer, M.D., Augusta; Joy Maxey, M.D., Atlanta; David Brown, M.D., Augusta.

Georgia Residents at the AMA House

RESIDENT physicians in Georgia were strongly represented at the recent American Medical Association's Resident Physicians Section (RPS) meeting in Chicago, June 13-15.

Six residents comprised our Georgia delegation:

David Brown, M.D., Fellow in allergy, Augusta

Regina Benjamin, M.D., third-year resident in family practice, Macon

Ron Davis, M.D., public health resident at CDC, Atlanta

Karolyn ("K") Kramer, M.D., third-year resident in anesthesiology, Augusta

Joy Maxey, M.D., third-year pediatrics resident in Atlanta

Steven Wilson, M.D., third-year family practice resident, Columbus

Key issues discussed in the 2½-day RPS meeting, which preceded the Annual AMA House of Delegates, included funding for graduate medical education, professional liability insurance for residents, tobacco products, and the use of the AMA Physician Masterfile.

Great concern was raised about continued funding of graduate medical education from all sources, but especially from Medicare. The percentage of indirect medical education funding from Medicare was decreased from 11.5% to 8.1% last year and will only be increased to 8.7% in 1988. Malpractice coverage was another hot issue. The Resident Physicians Section proposed that appropriate professional liability insurance for residents be provided as one of the requirements for accreditation of residency programs. This resolution passed the AMA House, and will now go before the Accreditation Council for Graduate Medical Education.

AMA RPS opposition to "designer ads" for cigarettes was incorporated into a larger anti-smoking resolution adopted by the House of Delegates. Other public health issues were also discussed, such as dangers of radiation and national handgun legislation.

Finally, at this meeting the AMA formally established a Young Physicians Section to give doctors just entering practice a voice inside the AMA House. The RPS actively supported the report of the AMA *ad hoc* Committee which emphasized the need for young physicians to become involved in organized medicine. The Committee defined the young physician as an M.D. under 40 years of age who has been in practice less than 6 years. The Young Physicians Section will have a delegate and alternate in the AMA House.

In all these discussions, our Georgia resident delegation was active and involved. And we have more than our share of leaders: Dr. Davis is on the AMA Board of Trustees; Dr. Kramer serves on the AMA Council on Medical Education; Dr. Benjamin is a member of the AMA Panel on Women in Medicine Project. Thus, on the Resident Physician level, as in the House of Delegates itself, Georgia continues to make its mark upon the AMA.

Such A Deal!

"Most of the previous writers on the subject adopted a negative view of the profession, seeking only to point out the failures or shortcomings of what they termed the 'regulars.'"

A THIN DIME in the 1980s buys very little, but have we got a bargain for you — for 10¢ per YEAR, you can buy 250 years of the history of the medical profession in Georgia!

It's true! Evelyn Ward Gay's book, *THE MEDICAL PROFESSION IN GEORGIA 1733-1983,* is for sale for twenty-five dollars ($25). Mrs. Gay is the wife of a physician, the mother of a physician, the mother-in-law of a physician, and the aunt of a physician, plus she is a member of the Auxiliary to the Medical Association of Georgia. She has an impressive journalistic background, a love of history, and a career as a writer and editor. Who better to tell the story of the medical profession in Georgia?

Mrs. Gay states in her Introduction, ". . . Most of the previous writers on the subject adopted a negative view of the profession, seeking only to point out the failures or shortcomings of what they termed the 'regulars.' Some concentrated their attention upon only the so-called 'controversies' within the profession. Others, while claiming objectivity, leaned too far one way or the other, more often presenting what they obviously hoped would be an 'intellectual approach' to the subject. . . . Fortunately, some conscientious historians recently have admitted that the best medical history has come from physicians and have given them proper credit for preserving and recording factual letters and papers pertaining to the past work of those in the profession. . . . Unfortunately, however, these physician-writers have had to rely largely upon the records of lay historians which often are filled with errors. . . . As Carlyle found, much of history is often a 'distillation of rumor.' . . . The current effort to review and publish a history of the medical profession in the State of Georgia for the past 250 years is not without many of the same difficulties which faced the writers of other days."

This book in itself is a real bargain, but in addition to this, all funds raised by the sale of this book, after expenses, go to the William R. Dancy, M.D., Student Loan Fund, which is used for the medical education of Georgia students with preference shown but not limited to members of physicians' families.

"Fortunately, some conscientious historians recently have admitted that the best medical history has come from physicians and have given them proper credit for preserving and recording factual letters and papers pertaining to the past work of those in the profession."

Isn't this a clever way for Georgia physicians and their spouses to "have their cake and eat it too"? They can keep the copy of the book and help the future Georgia physicians obtain their needed medical training.

The Auxiliary to the Medical Association of Georgia urges you to buy THE MEDICAL PROFESSION IN GEORGIA 1733-1983. No Georgia physician's home should be without one.

Contact:

Mrs. Brit B. Gay, Jr.
911 Vistavia Circle
Decatur 30033

Mrs. Talitha Russell
938 Peachtree Street
Atlanta 30309
404-876-7535

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely in this *Journal*. Manuscripts should be typewritten, double-spaced, and the original and one copy should be submitted. Receipt of manuscripts will be acknowledged and unused manuscripts returned. Used manuscripts will be returned only if requested.

STYLE — Ordinarily articles should not exceed 3,000 words. Only under exceptional circumstances will articles of over 4,000 words be published. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

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*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

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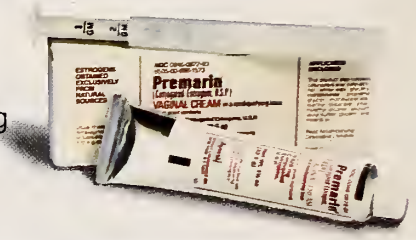
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For atrophic vaginitis

PREMARIN®
(Conjugated Estrogens)

Vaginal Cream

0.625mg/g



BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g. Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

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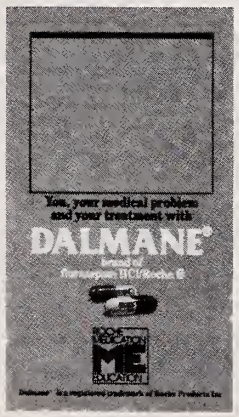
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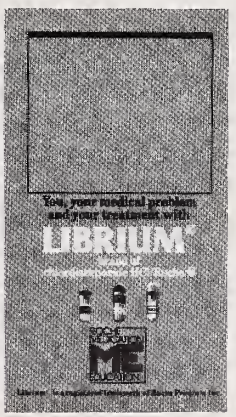
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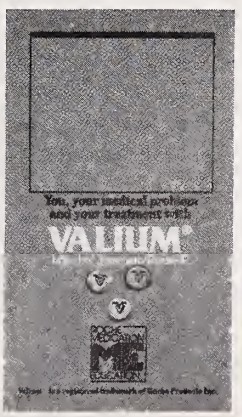
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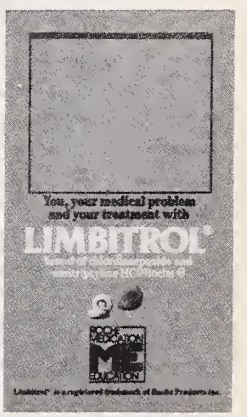
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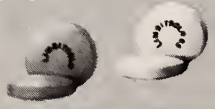
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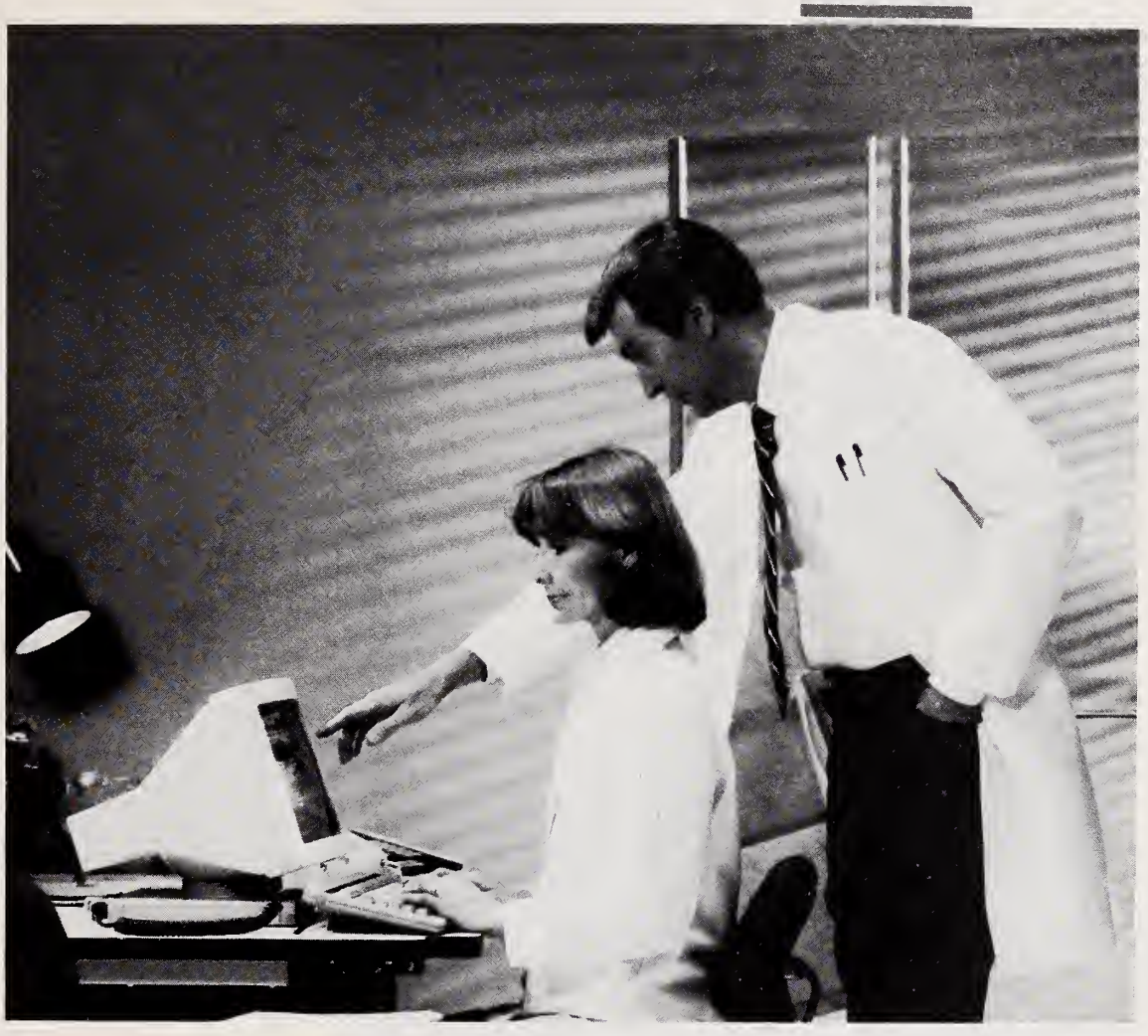
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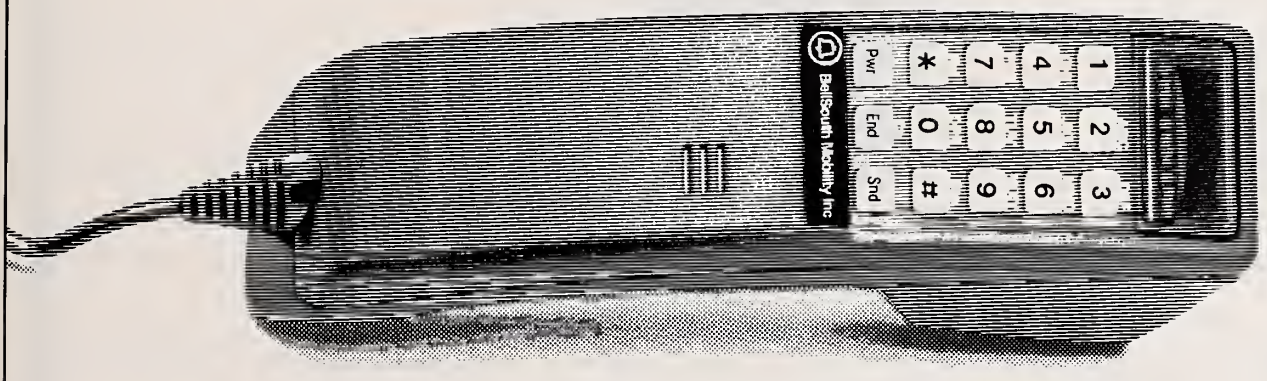
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COVER

This special issue of the *Journal* is sponsored by the Georgia Psychiatric Association and is introduced in the editorial on p. 591 by its president, Dr. Cassandra Newkirk.
Who are we behind our masks? Psychiatry can often help us discover ourselves. Cover illustration by Elizabeth Traynor of Atlanta.

Policies Regarding AIDS Debated

Dear Editor:

I have always had a great respect for CDC and the United States Public Health Service. CDC has done outstanding work in the fields of epidemiology and infectious diseases, and I can think of no organization that has done more to promote and foster the health and welfare of the people of the United States than the U.S. Public Health Service. I cannot, however, accept their policies and recommendations in regard to AIDS. I did not write this letter to ridicule or discredit the above mentioned organizations for their past good works or to become a "folk hero." I wrote this letter as a matter of conscience.

The HTLV-III (AIDS) virus is found in the blood and all of the secretions of the body including semen, saliva, urine, tears, vaginal secretions, etc. The exchange of any of these fluids can transmit the universally fatal disease, AIDS. Theoretically, one virion that gets in the conjunctiva of the eye or the mucous membranes of the nose, mouth, respiratory tract, gastrointestinal tract, or genitourinary tract could cause this fatal disease. The HTLV-III virus may also gain entrance into a non-infected body by sexual contact, from contaminated blood and blood products, through cuts or defects on the skin, or by punctures with needles or other equipment that come in contact with the blood or body fluids of an infected person.

CDC and the Public Health Service continually state that the AIDS virus is very fragile. This statement is contradicted by the studies done at Mt. Sinai Hospital in Miami, Florida, by Dr. L. Resnick. Dr. Resnick's studies show that the AIDS virus (HTLV-III) remains active and infectious in a dry atmosphere at room temperature for at least three days and that the virus remains active and infectious in a wet or damp atmosphere at room temperature for at least 15 days. Furthermore, clotting factors for hemophiliacs that are stored in a dry form in a refrigerator for days, weeks and even months, are still capable of producing the fatal disease, AIDS.

In my opinion, the failure of CDC and the U.S. Public Health Service to follow up on contacts of AIDS patients and to screen them with the HTLV-III antibody test and then counsel them on the transmission of this fatal disease, will be remembered as the biggest mistake in the history of medicine. Furthermore, the guidelines established by the above two organizations make routine screening of any individual by a private physician almost certain to result in litigation.

The reasons given by CDC and Public Health Officers for not following up on contacts are as follows:

1. "Many victims have 1000 contacts. How can you expect us to follow up on this many people?"
2. "AIDS is a fatal disease. There is nothing we can do for the patient anyway."
3. "The HTLV-III antibody test was developed only to screen blood donors, not contacts."
4. "Although we are approaching this disease (AIDS) from a public health perception, steps must be taken to maintain confidentiality and the rights of individuals."

I will answer the above statements in numerical order:

1. If a victim has 1000 contacts and if each of these have 1000 contacts, 1,000,000 people are going to die from AIDS or its complications. From another perspective, each contact that would be followed and screened with the HTLV-III antibody test then counseled to prevent dissemination of this fatal disease, would save 1000 lives.
2. We have no cure or vaccine for AIDS. Therefore, prevention of transmission is the only method we have of controlling the spread of this fatal disease. The fact that it is fatal makes follow up of contacts, screening them and counseling them on the transmission of this disease even *more* important than if this disease were non-fatal.
3. The HTLV-III antibody test with the confirmatory test are excellent medical tests and their accuracy approaches 100%. It is ludicrous to say this test was developed only for blood donors.
4. This last statement is the reason that this fatal disease has increased 175,000% in the past six years. From the start, I have felt that CDC and the Public Health Service were more interested in civil rights than in lives. By respecting the rights of privacy of HTLV-III infected people and their contacts and not following up on contacts and screening them with antibody tests, then counseling them, CDC and the Public Health Service are knowingly permitting infected people to infect other people with a universally fatal disease. This is not only bad medicine but in my opinion criminal. Human nature is such that until people are screened and it is proven to them that they are infected, they will deny even to themselves that they are possibly infected and continue spreading this fatal disease.

Until mandatory screening of all AIDS, ARC, and HTLV-III positive contacts, risk groups, food handlers, pre-marital couples, pregnant women, and people who are involved in close physical contact, such as athletes in contact sports and workers whose close physical contact can cause accidental lacerations, abrasions, and toothbites with the exchange of blood and body fluids, is permitted this fatal disease will continue to spread uncontrollably and become a serious problem for *all* people of our country. This has already happened in Africa and in Haiti.

Sincerely,
J. Nicholas Gordon, M.D.
Atlanta

Recommendations For Providing Dialysis Treatment to Patients Infected With HTLV-III/LAV (Human Immunodeficiency Virus)

Patients with end-stage renal disease who are undergoing maintenance dialysis and who have manifestations of AIDS or are positive for HIV infection can be dialyzed in hospital-based or free-standing dialysis units using convential infection control precautions. Standard blood and body fluid precautions and disinfection and sterilization strategies routinely practiced in dialysis centers are adequate to prevent transmission of HIV.

Risk factors for AIDS are similar to the risk factors for hepatitis B virus (HBV) infection. Prevention measures applied to control HBV infection in health care institutions were used as a model to develop infection control guidelines for patients with AIDS. Isolation of infected patients and non-reuse of a dialyzer by the same patient were initially recommended by patients receiving dialysis in dialysis centers. These strategies are not currently believed necessary for preventing HIV transmission. No transmission of HIV infection in the dialysis center environment has been reported and the possibility of such transmission appears extremely unlikely when routine infection control precautions are observed.

The following recommendations update infection control strategies for dialyzing patients with HIV based upon recent knowledge of HIV.

1. Standard infection control strategies that are used routinely in dialysis units for all dialysis patients and personnel should be used to prevent HIV transmission.
2. Patients infected with HIV can be dialyzed by either hemodialysis or peritoneal dialysis and do not need to be isolated from other patients. Treatment (method of dialysis) should be based on the needs of the patient. An individual dialyzer must never be used on more than one patient, but may be reused on the same patients in centers having a dialyzer-reuse program.
3. Precautions against needlestick injuries, as well as the use of appropriate barrier techniques, should be practiced by all personnel caring for any dialysis patient. Extraordinary care should be taken to prevent injuries to hands caused by needles, scalpels, and other sharp instruments or devices during all procedures.
4. None of the standard protocols or procedures need to be altered for cleaning, disinfection and sterilization after dialyzing patients infected with HIV. Chemical germicides used for disinfection and sterilization of devices in the dialysis center are effective against HIV.

(Reference: MMWR, June 13, 1986, Vol. 35, No. 23, and Georgia Epidemiology Report, August 1986.)

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Without a vaccine or specific treatment available, the only way of curbing the spread of the AIDS epidemic at this time is by *preventive education*. Physicians will be expected to provide knowledgeable leadership in this regard to their patients and their communities.

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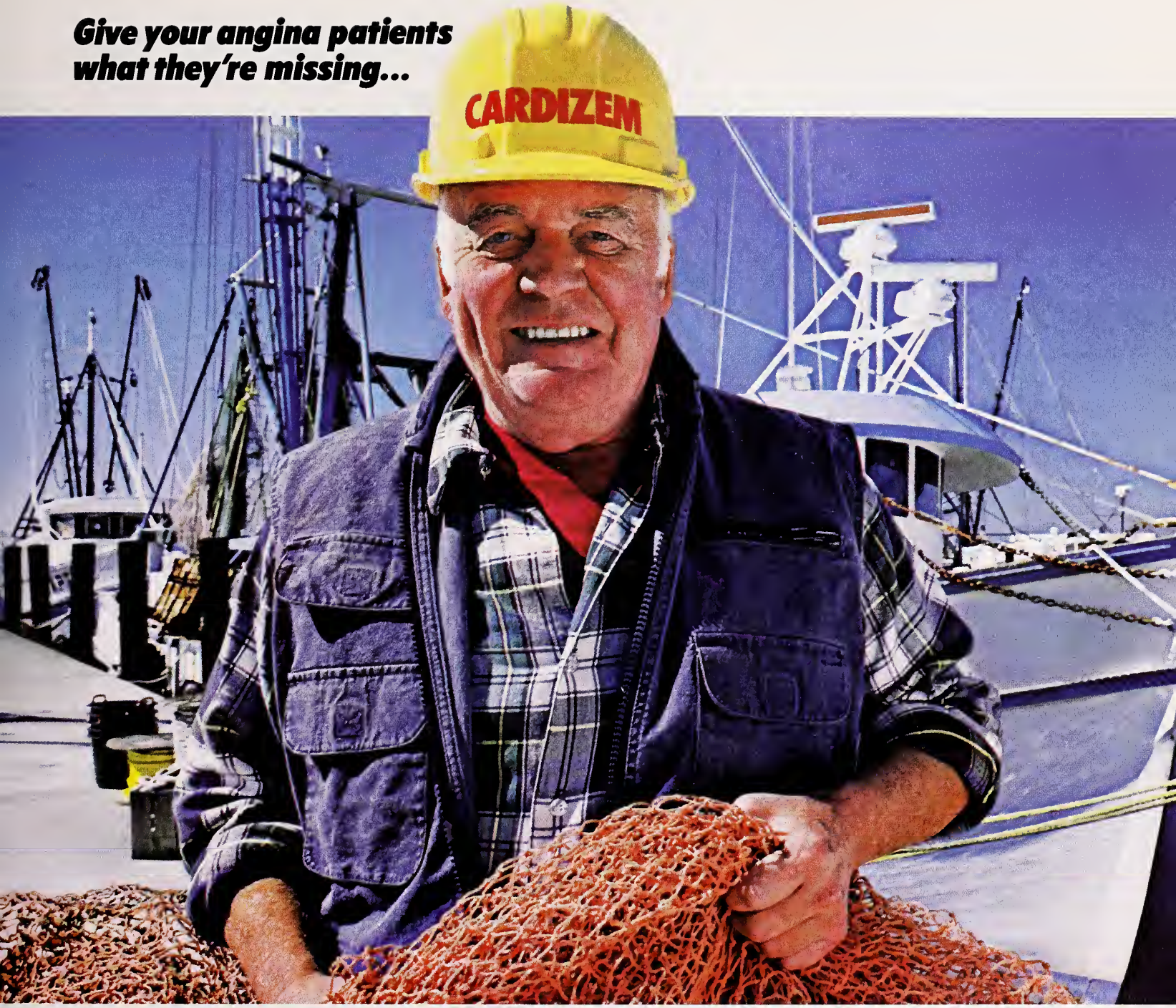
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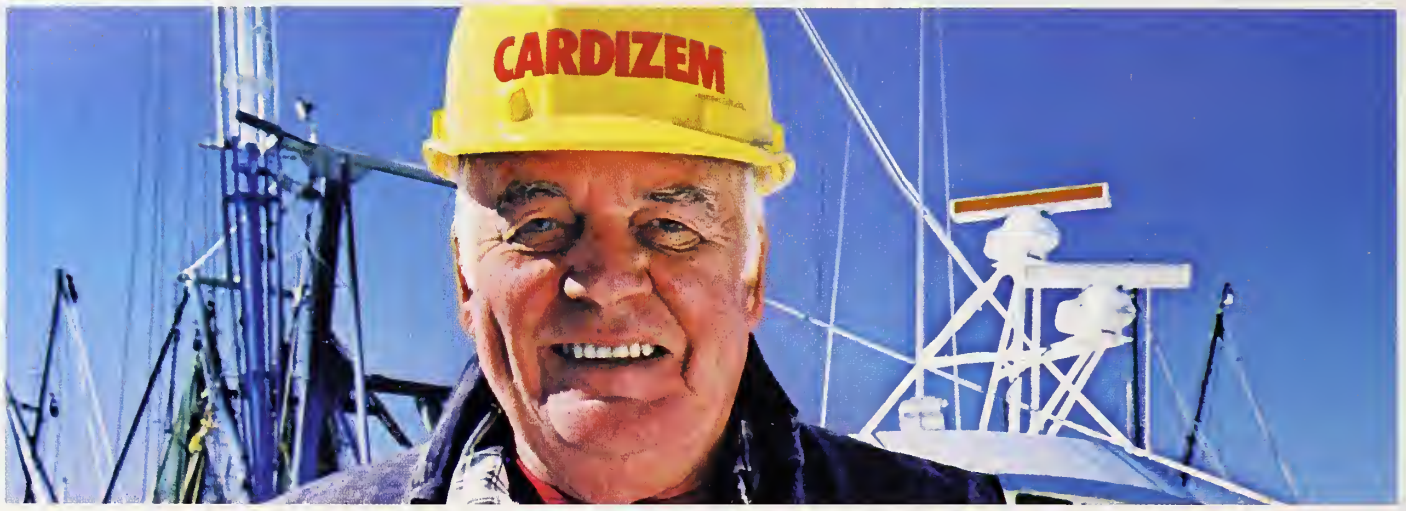
CARDIZEM®: FEW SIDE EFFECTS

diltiazem HCl/Marion

- ***Antianginal action includes dilatation of coronary arteries, a decrease in vascular resistance/afterload, and a reduction in heart rate***
- ***Proven efficacy when used alone in angina[1]***
- ***Compatible with other antianginals[2,3]****
- ***A safe choice for angina patients with coexisting hypertension, asthma, COPD, or PVD[4,5]***

***See Warnings and Precautions.**

Please see brief summary of prescribing information on the next page.



CARDIZEM® diltiazem HCl/Marion

FEW SIDE EFFECTS IN ANTIANGINAL THERAPY

60 mg tid or qid

Brief Summary
Professional Use Information

CARDIZEM®
(diltiazem HCl) 30 mg and 60 mg Tablets

CONTRAINDICATIONS
CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. ***Cardiac Conduction.*** *CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.*
2. ***Congestive Heart Failure.*** *Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt).*
 Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. ***Hypotension.*** *Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.*
4. ***Acute Hepatic Injury.*** *In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)*

PRECAUTIONS
General. *CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.*

Drug Interaction. *Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)*

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.*

Pregnancy. *Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.*

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. *Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.*

Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS
Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastrointestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 7/86*

See complete Professional Use Information before prescribing.

References: ***1.*** *Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers. Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347.* ***2.*** *Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984 24(Dec):150-159.* ***3.*** *Johnston DL, Lesoway R, Humen DP, et al: Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris. A placebo-controlled, double-blind, randomized, crossover study Am J Cardiol 1985;55:680-687.* ***4.*** *Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39.* ***5.*** *Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.*

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CALENDAR

OCTOBER

20-24 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

20-24 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

22-25 — *San Francisco, CA:* **American Medical Writers Association 1986 Annual Conference.** Contact Lil Sablack, Exec. Dir., AMWA, 5262 River Rd., Ste. 410, Bethesda, MD 20816. PH:301/986-9119.

23-24 — *Atlanta:* **Second Conference on Preventing Disease and Promoting Health in the Minority Community.** Category 1 credit. Contact Office of CME, Morehouse Sch. of Med., 720 Westview Dr., SW, Atlanta 30310. PH:404/752-1631 or 1632.

23-25 — *Atlanta:* **Pediatric Radiology: Update 1986.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

24-26 — *Atlanta:* **Shoulder Rehabilitation Symposium.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

26-29 — *Unicoi State Park:* **Institute on Group Behavior and Group Leadership.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

NOVEMBER

3-7 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

3-7 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH: 404/727-5695.

5-8 — *Sea Island:* **American Academy of Neurosurgeons.** Category 1 credit. Contact Ellis B. Keener, M.D., 434 Academy Street, Gainesville 30501. PH:404/523-3402.

7-8 — *Atlanta:* **Accountability in Rehabilitation Medicine: A New Way to Document Clinical Effectiveness.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

7-8 — *Atlanta:* **Day of Pediatrics: Advanced Pediatric Life Support.** Category 1 credit. Contact Darlene Baugus, R.N., Scottish Rite Children Hosp., Ed. Dept., 1001 Johnson Ferry Rd., Atlanta 30363. PH:404/252-9377.

8-11 — *Atlanta:* **SMA-MAG Annual Scientific Assembly.** Category 1 credit. Contact SMA, 2601 Highland Ave., Birmingham, AL 35201. PH:205/945-1840 or 800/423-4992.

13-15 — *Atlanta:* **Georgia Academy of Family Physicians Annual Meeting.** AAFP prescribed and AMA Category 1 credit. Contact GAFP, 3760 LaVista Rd., Ste. 100, Tucker 30084. PH:404/321-7445.

17-21 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

17-21 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

20-21 — *Atlanta:* **Alzheimer's Disease.** Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

DECEMBER

1-5 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

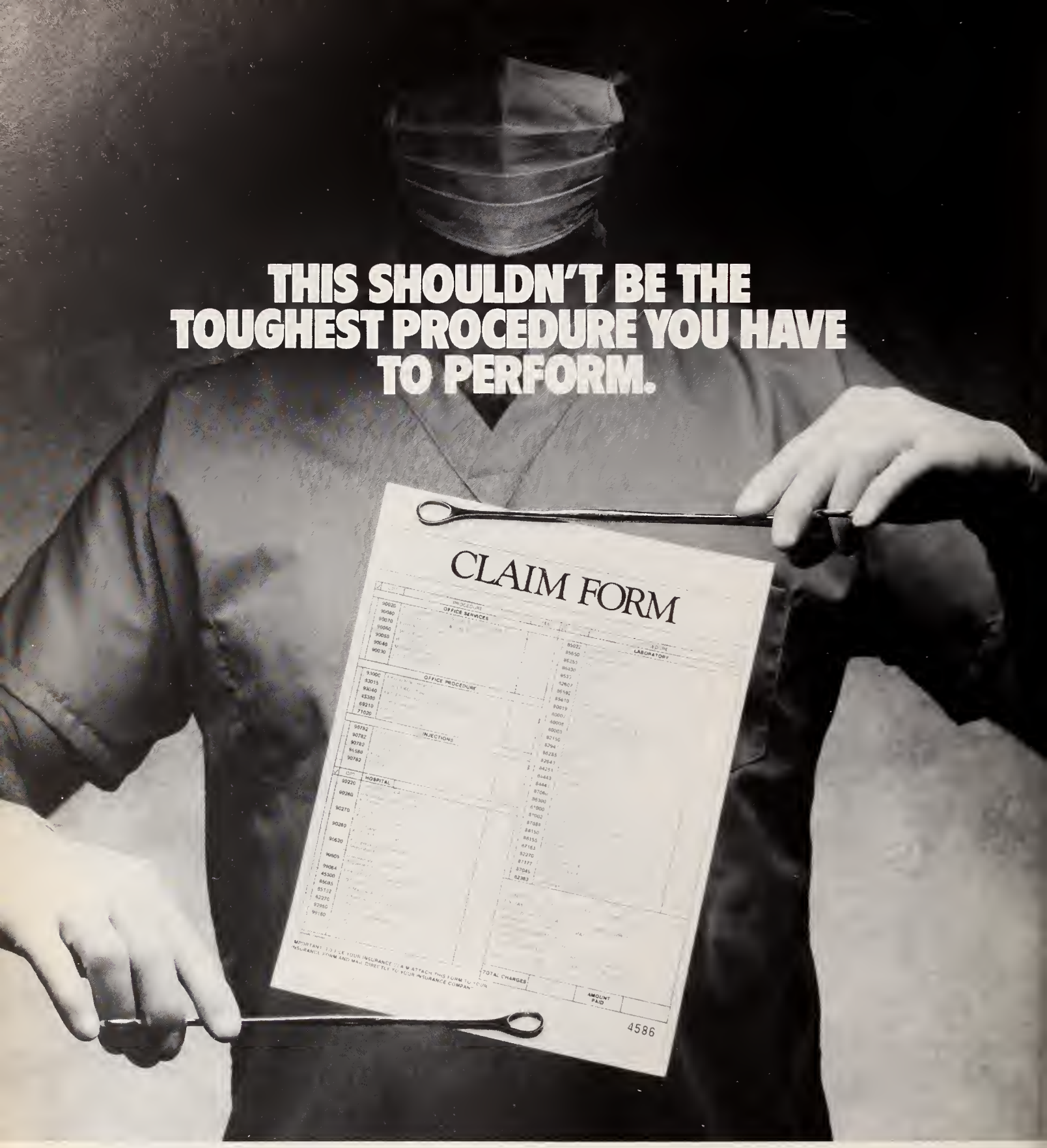
5-6 — *Atlanta:* **Current Advances in Ophthalmology.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

6-7 — *Atlanta:* **Regional Anesthesia: Surgery, Obstetrics and Pain.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

8-12 — *Atlanta:* **Magnetic Resonance Imaging.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

10-12 — *Atlanta:* **12th Annual Techniques in Orthopaedic Surgery.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

15-16 — *Atlanta:* **Quantitative Thallium Myocardial Tomography.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.



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Quality of Life — Whose Life?



John D. Watson, Jr., M.D.

WE ARE frequently faced with "maintaining a good quality of life" for the time remaining in a person's life who is under our care. This reminds me of epitaphs which I have never liked — after death, greatness, appreciation, and understanding ascend to cosmic levels.

What is the time-honored responsibility of physicians? To be available to those who need us because they are ill. To do all that we can within reason to return them to health, function, and a good quality of life. When many of us now reaching senior positions in medicine entered the field, it was automatically assumed that we would contribute 15-25% of our time and efforts to treating the poor and disadvantaged. This was our tithing to our fellow man. These patients were not necessarily placed in a degraded position for care, but they were not given "cadillac care" either, as someone had to pay the bill eventually. As physicians, we did not expect to receive compensation for our services, and we did not ask for it. The hospitals cooperated with us, the drug firm aided with contributions of drugs, many times through their samples distribution and other times, as now, on direct request. If we saw that we were trying to be taken by a deadbeat who really could affort to pay, of course pressure was applied.

What happened to this giving? For one thing, in our "free" clinics, we discovered that if we did not submit a professional charge, the clinic, by law, could not submit a charge for the support or technical side. Then, with the institution of Medicare and Medicaid, there was not really supposed to be any need for charity care. Thus, we almost abandoned one of the most important areas of service we had to offer. And before I hear the screams from our brethren in the family practice arena, I want to assure you that in the care of the disadvantaged for free, they by far hold the lead.

It appalls me to hear of the physician whose receptionist almost demands payment or a deposit before the patient even sees the doctor, or at least secures absolute reimbursement from a Third Party before allowing entry into the physician's office. Many people occasionally have financial difficulty. They are embarrassed and frequently deny themselves medical care when they really need it. Where is that compassionate physician who will treat them, then listen, counsel, and do everything he or she reasonably can to help the patient or the family regain their more secure position? Do your patients feel they can talk with you openly, work things out financially? More importantly, are they assured that you will be there to help them through their medical problems? We can spend a billion dollars on advertising telling the public how technically expert we are, but what does that mean to someone who is sick, down on their luck, in financial difficulty? I suspect it scares them more because they know there is a price tag to that technology.

We must go back to that role of the truly caring doctor who cares for the health of the individual first and then addresses how that care will be financed. We can thus defuse the growing legislative pressure to make radical changes to assist the disadvantaged. Even more importantly however, we can regain and enjoy the satisfaction of helping those less fortunate than ourselves by using our skills in their time of need. Not for financial gain, but for the professional satisfaction are we fulfilling our role as a doctor — to treat the sick and infirm. Look at your practice and your business methods — how do *you* measure up?

John D. Watson Jr. M.D.

Psychiatry — A Special Issue

***"Highlighting 'Mental Health Awareness Week' to dispell myths and misconceptions about mental illness is the purpose of this special issue of the* Journal."**

One out of every five Americans suffer, tragically, from a mental illness. However, due to the stigma associated with getting professional help, less than one-third of those who need treatment actually seek it. The week of October 5-11, 1986, has been proclaimed nationally and in Georgia as Mental Illness Awareness Week (MIAW), and the October issue of the *Journal* is dedicated to psychiatry.

During MIAW, the Georgia Psychiatric Association (GPA) along with the Georgia Alliance for the Mentally Ill (Ga. AMI) will be working diligently to help erase this stigma. However, we hope that the "awareness" of the public on this subject does not end on October 11. Educating the people about these illnesses and correcting their misconceptions about treatment is a year-round project.

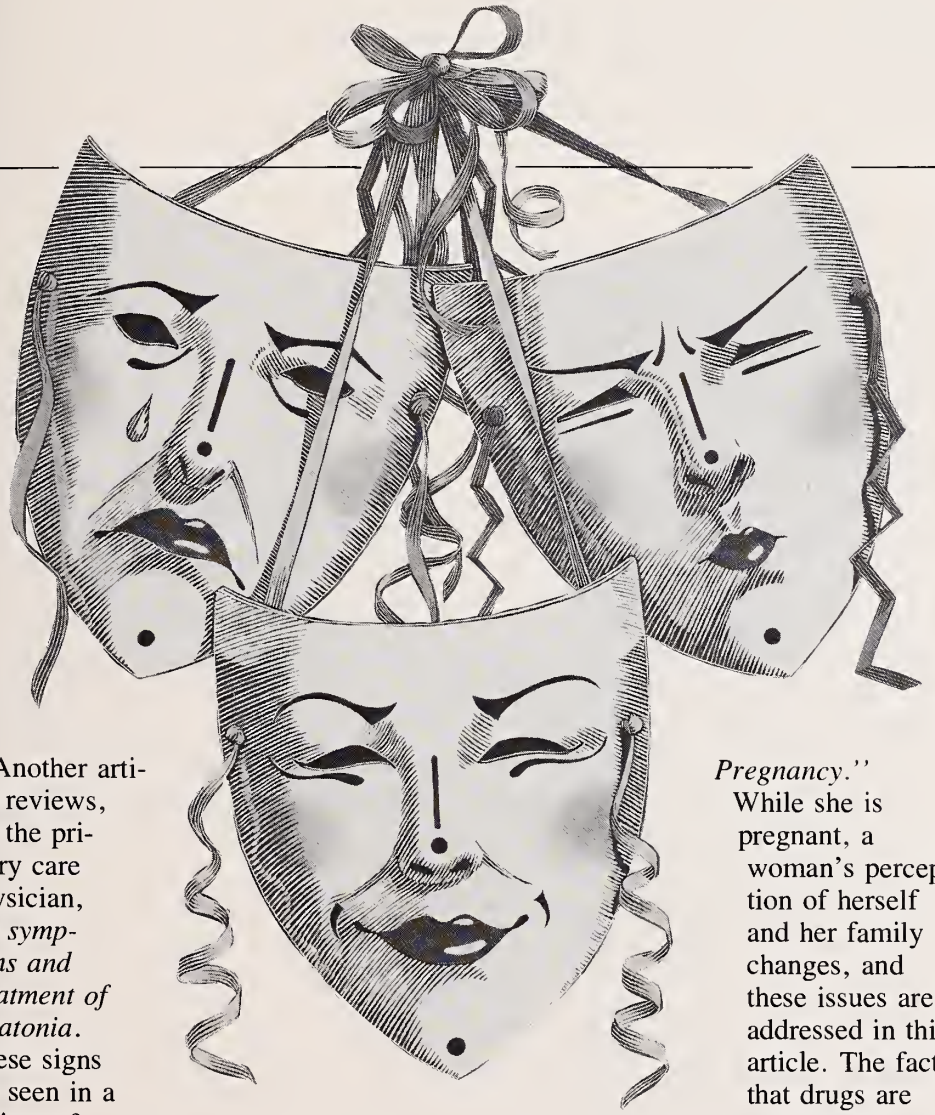
Several psychiatrists across Georgia have contributed articles for this issue. The articles range from depression and dementia in the elderly to learning problems in children to psychiatric treatment during pregnancy. The goal of this issue of the *Journal* is to help physicians recognize and understand that some of their patient's complaints may be a warning signal of a mental health problem.

Alan Stoudemire, M.D., and Carol Harpe, M.D., both from the Medical Psychiatry Unit of Emory University Hospital and Emory University School of Medicine, have written an article about the signs of *dementia and depression in the elderly patient*. If an elderly patient presents evidence of both of these disorders, there usually results a diagnostic and treatment dilemma. This article discusses the symptoms and an aggressive treatment approach for depression, regardless of whether or not significant cognitive dysfunction from underlying dementia is present.

Attention deficit disorders and learning disabilities of children and adolescents are discussed by Steven L. Jaffe, M.D. Dr. Jaffe is Director of Adolescent Programs at CPC-Parkwood Hospital, of Atlanta, and Associate Professor of Psychiatry at Emory University. His article organizes these problem areas so that the treatment approach is more appropriate and focused for the benefit of the child.

"Beyond Deinstitutionalization — Where Are They Now? discusses the theory and the actualities of deinstitutionalization. Written by Erwin R. Smarr, M.D., Medical Director of Psychiatry, Memorial Medical Center, Inc., in Savannah, the article emphasizes the homeless — those who are discharged too soon from the overcrowded psychiatric hospitals. Since they are not treated long enough, they are unable to adapt to life with their families or in a boarding house. Consequently, these mentally ill patients are left out on the streets. Some possible solutions to this growing problem are given.

EDITORIAL



Another article reviews, for the primary care physician, the *symptoms and treatment of catatonia*. These signs are seen in a variety of medical, neurologic, and psychiatric conditions. Special attention is given to the recognition and treatment of two different medication-induced catatonic reactions. The authors are Anne Marie Riether, M.D., Alan Stoudemire, M.D., and Gail F. Anderson, M.D., from the Department of Psychiatry of Emory University School of Medicine.

Steven R. Lee, M.D., has written *"Psychiatric Management During Pregnancy."* While she is pregnant, a woman's perception of herself and her family changes, and these issues are addressed in this article. The fact that drugs are not usually administered at all during pregnancy poses a significant treatment problem. The article reveals psychotropic drugs that can be given, with some precautions.

The article by Julian R. Gomez, M.D., P.C., discusses *psychiatry from the traditional psychoanalytic viewpoint*. A portion of the article consists of excerpts from a booklet by The Committee on Public Information of the American Psychoanalytic Association written by Arlene Heyman, M.D., and Gerald Fogel, M.D. Also, Dr. Gomez shares his insights and experience with *psychotherapy and its indications*. He reveals the types of psychotherapy each particular mental illness should receive.

In conclusion, the goal we want to achieve with MIAW is to educate the public about what mental illness is and what it is not. We hope to teach them that it is OK to get help. Many people do not know they have an illness that can be treated effectively. Therefore, the part that a physician could play in his practice is important for the purpose of detection. We hope this issue of the *Journal* will help physicians to better understand some of the symptoms of mental illness with which they may come in contact. Additional information is available to the public from GPA and/or the MAG.

Cassandra F. Newkirk, M.D.
Georgia Psychiatric Association
Chairman, Public Affairs Committee
131 Ponce de Leon Ave.
Atlanta 30308

Ethical Conduct

THE RECENT ARREST and sentencing of a Georgia psychiatrist on charges related to sexual misconduct with patients prompts me to speak in behalf of the nearly 500 psychiatrists in Georgia who are members of the Georgia Psychiatric Association, a District Branch of the American Psychiatric Association. From time to time such misconduct makes headlines in the media perhaps leading the general public and our fellow physicians to believe that such behavior is widespread among psychiatrists.

We, like most members of the general public, are always appalled when a member of our profession abuses the confidence and trust placed by patients seeking help. In following the media accounts of this recent incident, I noted that apparently a number of people were aware of the abuses. The situation had been ongoing for a number of years but no one brought it to our attention, much to our surprise. The absence of any complaints has made us question the reasons why. Perhaps people don't know there are mechanisms of redress available.

It seems unnecessary to reiterate that psychiatrists do not condone unethical or unprofessional conduct. We are only too well aware that our profession has a small number of "bad apples." The Professional Standards Committee has the responsibility for investigating complaints of unethical conduct and recommending to the Associaiton that appropriate action be taken.

The Georgia Psychiatric Association is a strong supporter of high ethical standards for its members. As for the small minority who abuse the trust of patients, the Association stands ready to act appropriately in behalf of any patient who might be harmed as a result of unethical practice.

William S. Davis, M.D.
Rome, Georgia

"The Georgia Psychiatric Association stands ready to act appropriately in behalf of any patient who might be harmed as a result of unethical conduct."

The Diabetes Center

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1001 Johnson Ferry Road, NE, Atlanta, Georgia 30363
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The Diabetes Center provides a hospital-based comprehensive program for infants, children and young adults who have insulin dependent diabetes mellitus. Our specialists, through a multi-disciplinary team approach, assist patients from birth to 18 years of age to adapt emotionally and physically in the self-management of their disease.

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- Evening educational courses for relatives and other caregivers

Medical Director:
Robert M. Schultz, M.D.
Pediatric internship, residency and fellowship
in Pediatric Endocrinology and Diabetes
at Children's Hospital, Buffalo, NY

Co-Medical Director:
Stephen W. Anderson, M.D.
Pediatric internship, residency and fellowship
in Pediatric Endocrinology and Diabetes
at Children's Hospital, Buffalo, NY

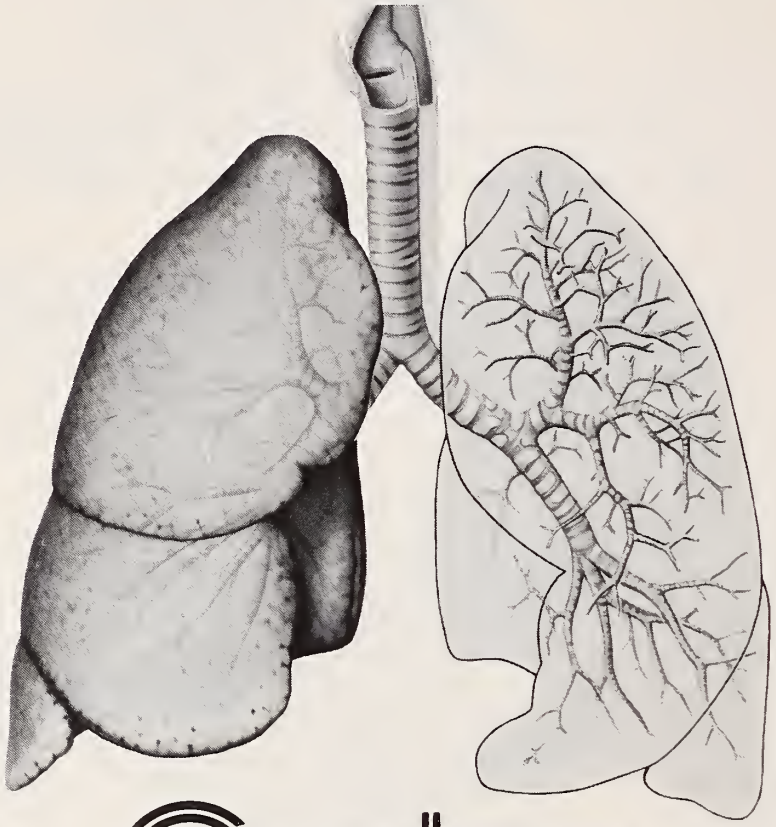
Staff includes a nurse coordinator, clinical nurse educator, recreational exercise therapist, dietitian, social worker/counselor and 20 registered nurses. Patients can be referred from primary care physicians or agencies. To make an appointment, call the Center at Scottish Rite Children's Hospital: 252-0753.

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(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor® is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor® (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly)

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600332

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ibuprofen



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J-6138 January 1986

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

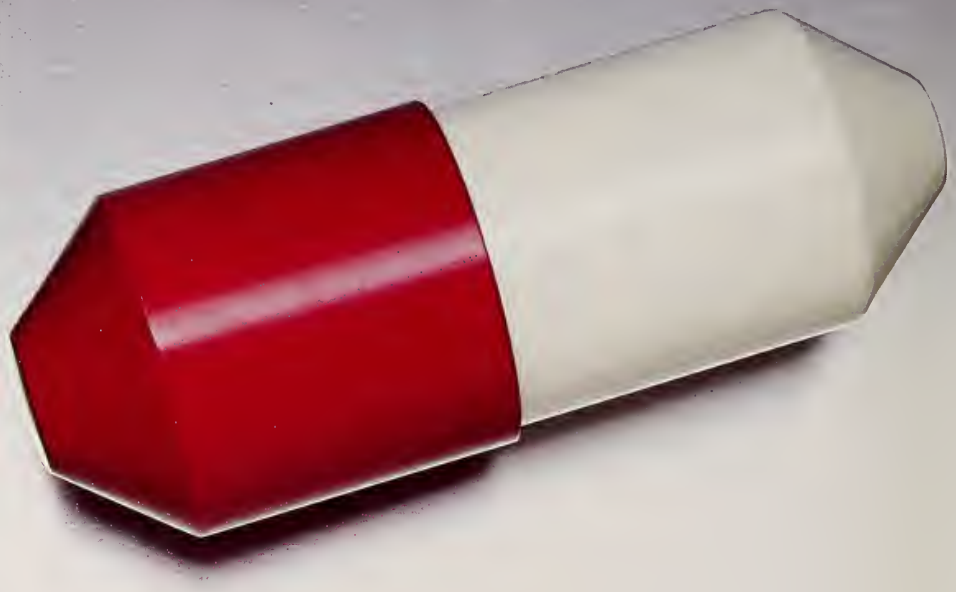
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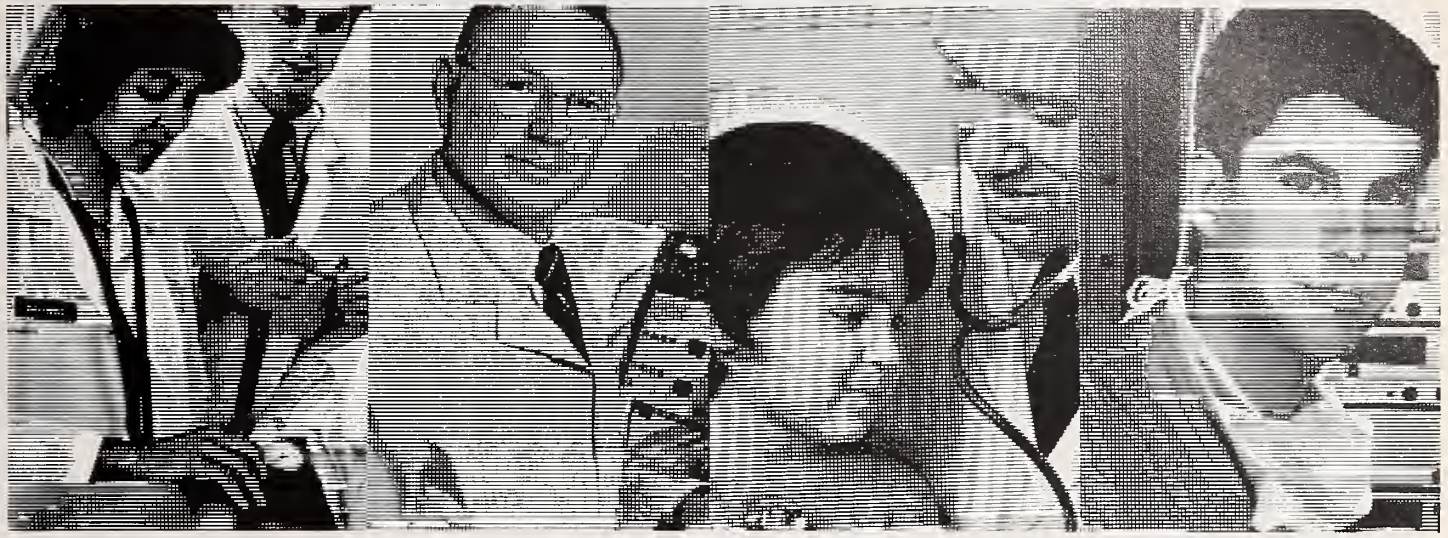
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DIAGNOSIS AND TREATMENT OF DEMENTIA AND DEPRESSION IN THE ELDERLY

ALAN STOUDEMIRE, M.D., CAROL HARPE, M.D.

A review with recommendations for evaluation and treatment.

Abstract

Elderly patients who present clinically with evidence of both dementia and depression are often diagnostic and treatment dilemmas. This paper examines the signs and symptoms of dementia and depression in the elderly and advocates a treatment approach based on aggressive treatment of depression regardless of whether or not significant cognitive dysfunction from underlying dementia is present. Special pharmacologic considerations in using cyclic antidepressant agents in the elderly are discussed.

In the next 50 years, the elderly population of the United States will double, reaching more than 50 million people.[1] As a result, by the year 2030 almost one in five Americans will be over age 65.[2] Physicians of all specialties will therefore be evaluating changes in intellectual and cognitive functioning in elderly patients also suffering from concurrent medical diseases. This paper reviews the differential diagnosis of dementia and depression in the elderly with recommendations for evaluation and treatment. The diagnostic assessment of dementia will be considered first.

Differential Diagnosis of Dementia

Dementia vs. Delirium

Dementia (also called chronic organic brain syndrome) is a nonspecific term for global impairments in mental functioning with specific deficits in memory, mood, intellect, orientation, and judgement.[3] The majority of cases in the elderly are caused by Alzheimer's disease and multi-infarct dementia. The cognitive changes occurring in dementia usually have an insidious onset, but during the early stages of dementia, the patient's level of awareness usually is stable. In the end stages of dementia, however, level of consciousness may progressively decrease. In contrast, delirium (formerly designated "acute organic brain syndrome") is diagnosed when an acute change occurs in the patient's level of consciousness. Fluctuations in consciousness and awareness may progress to stupor and coma over a few hours to days.[4] Delirium can be the result of many medical illnesses and can be superimposed on a pre-existing dementia. Other signs and symptoms of delirium include autonomic dysfunction, tremors, hallucinations, disorientation, sleep disturbance, agitation, psychotic behavior, and confusion. Many causes of delirium, if left untreated, may lead to permanent dementia. *The major factor that differentiates dementia from delirium is that in dementia the patient's level of awareness remains relatively stable* while in delirium, *the level of awareness is diminished and fluctuates.*

Signs and Symptoms of Dementia

The majority of dementias in the elderly are from Alzheimer's disease (about 60%) and the remainder from multi-infarct dementia (20%) or a combination of Alzheimer's and multi-infarct dementia. About 10% of dementia result from miscellaneous causes such as tumors, trauma, normal pressure hydrocephalus, and a variety of other metabolic and relatively rare neurologic conditions.

The hallmarks of dementia are a disturbance in memory along with a deterioration in higher cortical functioning. Changes in higher cortical functioning can include aphasia, anomia, agnosia (inability to recognize faces or objects), apraxia (construc-

Drs. Stoudemire and Harpe are with the Medical Psychiatry Unit, Emory University Hospital and Emory University School of Medicine, Atlanta. Send reprint requests to Dr. Stoudemire, Director, Medical-Psychiatry Unit, Section of Psychiatry, Emory Clinic, 1365 Clifton Rd., Atlanta, 30322.

tional difficulties), and inability to think abstractly. Impaired judgment, personality changes, and psychosis may also accompany dementia.

Stages of Alzheimer's Type Dementia

Dementia of the Alzheimer's type, the most frequent cause of dementia in the elderly, occurs in progressive phases which can be thought of as early, middle, and late. In the early phase, cognitive difficulties may be subtle and are often denied by the patient. Many symptoms are psychiatric in nature, including personality changes, paranoia, hypochondriasis, apathy, irritability, and depression. Classic symptoms of dementia in the *middle phase* are progressive impairments in memory, judgment, intellect, and affect. Remote memory may be relatively intact. Impaired judgment becomes apparent in behavioral indiscretions noticed by the family and employers. Other personality changes include loss of impulse control, inattention to social amenities, dress, and personal hygiene. Disorientation becomes progressive from first losing track of time (e.g., date, time of day, season) to place (name of hospital, city) and eventually to the person himself (name, birthday). Paranoid psychoses may also occur.

In the late phase of dementia, the identity and personality of the patient may be totally lost. Neurologic symptoms such as ataxia, incontinence, and seizures may occur. The level of consciousness may progress to coma, stupor, and eventually death.

Differential Diagnosis of Cognitive Dysfunction in the Elderly

A thorough history from the family is important to obtain information concerning premorbid functioning, chronologic course of symptoms, memory impairments, or other changes in behavior that the patient may not be aware of or attempts to deny. Evaluation of medications is of prime importance, as the incidence of drug reactions increases markedly with age. Many elderly patients are on multiple medications and may be especially susceptible to drugs with psychoactive effects. Psychotropic, analgesic, anticonvulsant, anticholinergic, and antihypertensives are the drugs commonly implicated in adverse drug reactions. Age-related changes in hepatic and renal physiology alter the metabolism of most drugs and require that the geriatric patient be monitored closely, with a dosage reduction often required.

Reversible etiologies of cognitive dysfunction in the elderly can be broadly divided into medical and psychiatric/neurologic conditions. Dysfunction of any major body systems such as chronic pulmonary, cardiac, hepatic, or renal disorders can cause alterations in intellectual function (Table 1).

Patients who suffer with systemic diseases are extremely susceptible to metabolic imbalances which affect the brain. Hypothyroidism, vitamin deficiencies, intracranial disorders, and infections can produce symptoms of dementia. The diagnosis of dementia (particularly of Alzheimer's disease) should never be made without thorough general medical evaluation to rule out a potentially treatable condition affecting the patient's cognition. Often after treatment, mental function dramatically improves with medical intervention alone.

Psychiatric/Neurologic Etiologies

Neuropsychiatric disorders in the elderly can mimic the symptoms of dementia or may occur concurrently with dementia. Chronic schizophrenia and normal pressure hydrocephalus can be present with symptoms of dementia. History of substance abuse of alcohol or sedative hypnotic agents is frequently not volunteered or readily elicited in the evaluation of elderly patients.

Depression is probably the most common psychiatric condition which may be overlooked in the elderly. Depression can not only present with symptoms of dementia, but it often occurs concomitantly with dementia. Symptoms of depression are often obscured or confused by a concurrent dementia (see below).

Diagnostic Workup of Cognitive Changes in the Elderly

A thorough history from family as well as a mental status examination

Table 1 — Etiology of Reversible Sources of Cognitive Dysfunction in the Elderly

Medical
Medications (analgesics, tranquilizers, etc.)
Drug-drug interactions
Chemical intoxications (alcohol)
Metabolic/Electrolyte disturbances (eg hyponatremia)
Endocrinopathies (particularly hypothyroidism)
Systemic illnesses
Cardiac
Pulmonary
Renal
Hepatic
Infections of the CNS
Nutritional deficiencies (particularly B_{12}, Thiamine)
Environmental (changes in environment)
Hospitalization
Nursing home placement
Neuro/Psychiatric
Trauma
Subdural hematoma
Anoxia
Tumors
Hydrocephalus
Multiple sclerosis
Parkinson's disease
Psychiatric
Major depression
Chronic schizophrenia

Table 2 — Diagnostic Workup of Cognitive Dysfunction in the Elderly

Physical and neurlogic exam
Vital signs
Review medications/drug levels
Blood and urine toxicology screens
CBC, SMA-18
Urinalysis
Liver, renal function tests
Thyroid function tests
B_{12}, folate levels
Sedimentation rate
VDRL/RPR/STS
Chest X-ray
ECG
CT scan
EEG
Neuropsychologic testing
As indicated:
Arterial blood gases
Lumbar puncture
ANA

begin the medical evaluation (Table 2). An assessment of medications is essential, including over-the-counter preparations. If the history for drug use is unreliable, toxicology screens may be needed. Every patient needs to have a physical examination. Routine blood tests should be done as part of any initial evaluation (SMA-18, CBC). Other specific blood tests should be obtained as indicated, such as thyroid function tests and arterial blood gases if indicated. The neurologic evaluation should usually include a CT scan even if focal neurologic findings are absent. An EEG may indicate abnormal electrical activity but rarely yields a definitive diagnosis. A lumbar puncture should usually be a part of the dementia workup, providing the patient has no symptoms of increased intracranial pressure (papilledema, headache, focal neurologic findings). After the medical/neurologic exam has been completed, an assessment of the patient's psychiatric status should be performed, with particular attention to the presence of depression if significant signs of irreversible dementia (such as Alzheimer's disease) are present.

Depression in the Elderly

The cardinal symptoms of major depression (otherwise known as endogenous, vegetative, biologic, or melancholic depression) are depressed mood and anhedonia (a pervasive loss of interest and pleasure in life). Associated physical symptoms include sleep disturbance, loss of appetite, weight loss, indigestion, constipation, decreased libido, impotence, fatigue, and lethargy. Thought processes associated with major depression include feelings of worthlessness, guilt, hopelessness, obsession and somatic (hypochrondriacal) fixations, preoccupation with death, pessimism, cynicism, and suicidal ideation. Even in patients without premorbid dementia, concentration and memory can be negatively affected. Paranoid behavior and auditory hallucinations are seen in psychotic depression.

"It is quite common for patients to deny their depression and psychologic problems and conflicts both to themselves and families, leading to long delays in seeking or accepting treatment."

In our experience in treating large numbers of depressed geriatric patients on our combined medical-psychiatric unit at Emory Hospital, the verbal response of the patient to direct questions such as "Are you depressed?" are quite unreliable in making the diagnosis for a number of reasons. First, it is quite common for patients, particularly elderly patients, to view depression as a sign of being "crazy" or a sign of spiritual or moral weakness and failure. Moreover, it is quite common for patients to deny their depression and other psychologic problems and conflicts both to themselves and families, leading to long delays in seeking or accepting treatment. Finally, in addition to denial, some patients, particularly those with limited cultural, educational, and psychologic sophistication, will have a limited psychologic "vocabulary" and have a limited ability to conceptualize or verbally express their distress in psychologic terms. Depression in these types of patients is usually manifested by sleep disturbance and other somatic complaints.

Despite the relatively unreliability of verbal reports, a number of other historic information and signs and symptoms may indicate the presence of a major mood disorder in this population. In our experience, the presence of sleep disturbances, particularly early morning awakening, if it is not "masked" by concurrent use of sleeping medications, is practically the *sine qua non* of depression in the elderly. The disturbance in sleep may lead to difficulty concentrating, anxiety, agitation, and difficulty with memory and concentration. In addition to sleep disturbance, the majority of elderly patients with depression will have other, sometimes multiple, physical complaints that may be mistaken as simple hypochondriasis. Oftentimes this type of behavior is manifested by preoccupation with the bowels and bowel movements.

Careful questioning of the family is critical in the diagnosis of geriatric depression. Even if the patient denies his/her depression or has limited psychologic insight, the family will usually describe some degree of loss of interest in life, apathy, and social and emotional withdrawal. Anhedonia may be manifested as a lack of interest in church, newspapers, or in favorite television programs.

A careful family history for psychiatric disorders is critical since a strong genetic component has been demonstrated for depression. Patients and their families should be asked if the individual or other family members suffered previous bouts of depression or other psychiatric illness, and if treatment was received (medication or electroshock therapy). Many, if not most, patients may have

received either no treatment or inadequate treatment despite serious periods of depression in their life.

A major pitfall that may obscure the diagnosis of depression in the elderly relates to the high degree of somatic complaints exhibited in this population, particularly insomnia, anxiety, and agitation. Many of these patients may receive "symptomatic" treatment, such as benzodiazepine sleeping medications or neuroleptics for insomnia, agitation, and anxiety. While benzodiazepines may bring some short-term relief, they may mask the depression, thus leading to further deterioration.

Suicide risk must always be considered in the diagnosis of depression in the elderly. High risk factors for potential suicide include patients who are living alone, are divorced, are alcoholic, or have concurrent medical conditions with a bleak prognosis. Elderly men, particularly those who become despondent after retirement, appear to be a high risk category. Patients and their families should be vigorously questioned regarding suicidal thoughts, including specific plans and methods they may have had in mind, and appropriate protective measures taken.

Concurrent Depression and Cognitive Changes in the Elderly

The presence of pre-existing cognitive deficits, whether due to early (relatively stable or moderately advanced) Alzheimer's disease or a multi-infarct/cerebrovascular dementia should not deter clinicians from treating depression in elderly patients.[5] In our experience, concurrent depression, superimposed on pre-existing dementia greatly exacerbates the overall functional disabilities of the elderly individual. Effective treatment of depression in cognitively impaired elderly patients is of even more importance, since dementia (including Alzheimer's type) may be relatively stable over long periods of time. The patient's quality of life can thus often be markedly improved, although the long-term prognosis may be relatively unfavorable.

Table 3 — Diagnostic Possibilities in Concurrent Depression and Dementia in the Elderly

1. **Major depression — no cognitive dysfunction**
2. **Major depression — mild cognitive dysfunction secondary to depression (pseudodementia)**
3. **Major depression — concurrent Alzheimer's type or multi-infarct dementia**

Even if the elderly patient has no evidence of dementia or has only minor problems with short-term memory ("benign senile forgetfulness"), depression can worsen problems with memory and other cognitive functions, such as attention and ability to concentrate.[6] Certain elderly patients with major depression may be diagnosed simply as "demented" because of the pervasive effects that depression has on their cognitive faculties. This condition, often called "pseudodementia," is a misnomer, since the cognitive problems experienced by elderly depressed patients *without* evidence of prior or underlying dementia are usually in the realm of memory, attention, and concentration, and they do not show dysfunction of higher cortical (particularly parietal lobe) dysfunction such as aphasia, anomia, and visual-perceptive difficulties. We prefer to refer to the memory and concentrating problems of "pure" depression as "cognitive dysfunction secondary to depression" rather than pseudodementia.[7]

"The hallmarks of dementia are a disturbance in memory along with a deterioration in higher cortical functioning."

A common problem is the occurrence of concurrent depression and pre-existing dementia. Unfortunately, depression in patients with dementia is often "written off" and attributed to the dementing process with insufficient attention devoted to efforts at treating the depressive component of the patient's condition. The various diagnostic possibilities of concurrent dementia-depression are noted in Table 3.

A practical approach to the treatment of depression in the elderly involves aggressively evaluating and treating the depression *regardless* of whether dementia is present. If dementia is suspected, most patients should receive a full medical and neurologic evaluation as outlined in Table 2. In particular, a close examination of medications is absolutely essential, particularly psychotropics such as benzodiazepines or other types of sedatives and sleeping medications. Patients should be tapered off these and other nonessential medications and reassessed for evidence of cognitive dysfunction. In 5 to 10% of elderly patients presenting with cognitive dysfunction, an underlying medical/neurologic or drug effect is found to be a major contributing factor to their deteriorations.

Likewise, certain medical conditions, such as occult carcinomas of the colon and pancreas can present with symptoms of depression, emphasizing the need for all patients being considered for antidepressant treatment to receive a careful physical examination and basic medical evaluation.[8] Our diagnostic evaluation of depressed elderly individuals includes a physical examination, vital signs, and review of medications. Basic laboratory work includes a CBC, SMA-18, thyroid panel (including TSH), urinalysis, stool guaiac test, EKG, and chest X-ray. The pri-

mary medications that can exacerbate or "mimic" depression include reserpine, methyldopa, and probably propranolol. Steroids may induce either depression or mania.

Assessment and Pharmacologic Treatment of Depression in the Elderly

Before discussing pharmacologic treatment of major depression in detail, note should be made of the psychosocial assessment of patients with depression. A psychosocial "precipitant" should be searched for in all cases, including deaths in the family, geographical separations from home or family, discouragement from incapacitating physical illness, family conflict, social isolation, and financial difficulties. The "precipitant" may be subtle to detect, and stress leading to depression may have occurred over time, such as the gradual loss of friends and family through separation or death or progressive loneliness and isolation. In each instance, identification of the precipitating event can lead to further supportive counseling with the patient and family in the office setting or psychiatric referral for consultation if formal psychotherapy seems indicated. In any case, in most instances, the family should be involved, and counseling and psychotherapy may be pursued with concurrent antidepressant drug therapy.

"The primary problem with cyclic antidepressants in the elderly is orthostatic hypotension."

The cyclic antidepressants are the drugs of choice in the treatment of major depression in the elderly with or without concurrent cognitive deficits (Table 4). The choice of antidepressants is largely dependent on appropriately selecting and using an antidepressant based on its side effect profile which may differ considerably among the current available antidepressants. The primary side effects that cause problems in the elderly are anticholinergic (dry mouth, constipation, confusion, urinary retention, blurred vision), orthostatic hypotension, and occasionally heart block.

Table 4 — Cyclic Antidepressants

	*Therapeutic Dose Range**
Low Anticholinergic Side Effects	
Desipramine (Norpramin)	25-150
Maprotiline (Ludiomil)	50-150
Trazodone (Desyrel)	200-600
Low Cardiac Side Effects	
Doxepin (Sinequan, Adapin)	50-300
Trazodone (Desyrel)	200-600
Low Orthostatic Hypotensive Effects	
Nortriptyline (Pamelor)	25-150
Maprotiline (Ludiomil)	50-150
Desipramine (Norpramin)	25-150

* May need significantly lower doses in elderly dependent upon toleration of side effects. Starting doses should usually be 10-25 mg p.o. q.h.s.

Drugs with relatively lower anticholinergic potential are desipramine (Norpramin) and maprotiline (Ludiomil). Trazodone (Desyrel) has few anticholinergic effects, but in our experience has a weaker antidepressive effect than the standard tricyclics. The dose range for trazodone is 200 to 600 mg/day; elderly patients tolerate its sedative affects poorly in higher doses (above 300 mg/day) which are often necessary for the drug to be effective. The major cardiac side effects of the standard cyclic antidepressants are primarily limited to quinidine-like affects and orthostatic hypotension. Standard tricyclics, such as amitriptyline and imipramine, may prolong cardiac conduction time, and in patients with pre-existing first and second degree heart block, may lead to high degrees of heart block or AV dissociation.[9-11] Premature ventricular contractions usually decrease after anti-depressant treatment because of their quinidine-like effect.[10] Doxepin has little effect on cardiac conduction and is the drug of choice in patients with evidence of first degree heart block or right or left bundle branch block. If patients have congestive heart failure (CHF), the cyclic antidepressants may be used safely if the CHF is stable and prominent orthostasis is not present.[11]

The primary problem with cyclic antidepressants in the elderly is orthostatic hypotension. Propensity for orthostasis is greatest is CHF is present or if the patient has significant orthostasis prior to treatment. While orthostasis may be helped by conservative, low-dose loading doses, orthostasis often limits reaching therapeutic doses necessary for maximum antidepressant effectiveness. Nortriptyline, desipramine, and maprotiline probably have less propensity to cause orthostasis than the other cyclic antidepressants.

In respect to dosing, antidepressants can usually be given as a once-daily dose, usually 2 to 3 hours prior to bedtime. Since the peak serum level is usually reached 2 to 4 hours after the initial dose, this will allow maximum sedative effects to coincide with bedtime.

An initial dose of as little as 10 mg may be necessary in frail elderly patients, or those otherwise prone to orthostatic hypotension. Usually an initial dose of 25 mg is safe and may be increased by 10 to 25 mg every fourth day. The dose of antidepressants should be titrated upward in this manner until a therapeutic dose is

Table 5 — General Approach to Treatment of Depression in the Elderly with/without Concurrent Dementia

1. **Assess level of cognitive dysfunction.**
2. **Taper off from benzodiazepines or other sedatives and other nonessential medications, then reevaluate.**
3. **If cognitive dysfunction (dementia) present, rule out treatable causes (see Table 2).**
4. **Independently assess level of depression regardless of presence of dementia. Rule out underlying medical illness or drug effect as a contributing factor.**
5. **Examine psychosocial precipitants for depression and family situation. Consider office counselling or referral for psychiatric evaluation and therapy.**
6. **Institute cyclic antidepressant therapy (see text).**
7. **Titrate antidepressant dosage upward by 10 to 25 mg every 4 days until a therapeutic dosage reached (see text, Table 4).**

achieved. Not all elderly patients necessarily need "lower" doses. While this may be true in some patients, because of decreased hepatic metabolism, volume depletion, and sensitivity to side effects, it is not true for all elderly patients. The dose needed for effective treatment may be the same as those tolerated by younger patients. If a patient can tolerate 150 mg/day without undue sedation or orthostasis, then this should be the target dosage, although lower doses may be sufficient or even absolutely necessary because of side effects.

Doxepin should be considered in depressions that are accompanied by severe sleep disturbance, agitation, and anxiety because of its sedating qualities which often obviate the need for adjunctive use of sleeping pills, benzodiazepines, or neuroleptics. Its major limitation is in slightly more pronounced anticholinergic effects. If anticholinergic effects are a major problem (such as in refractory constipation, urinary retention in patients with benign prostatic hypertrophy) or if sedation is not required, desipramine or maprotiline may be used. Nortriptyline may have some advantages in patients prone to orthostatic hypotension but its advantages in this respect are debatable.[12] We avoid the use of amitriptyline (Elavil) and imipramine (Tofranil) in the elderly because of their high degree of anticholinergic and orthostatic side effects.

Improvement in depressed mood may take 4 to 8 weeks to occur, even *after* a therapeutic dose has been achieved. Improvements in sleep, anxiety, and agitation, however, may occur in the first week. If a patient's mood has not improved somewhat after 3 weeks on a therapeutic dose, then a serum tricyclic level may be helpful, since wide variation in rate of metabolism and absorbtion can be seen with these drugs. Therapeutic serum levels have been established for amitriptyline, imipramine, desipramine, and nortriptyline.

Because of the elderly patients' propensity for constipation, we also always begin patients on *generic* docusate sodium (Colace) 200 to 400 mg/day with their antidepressant and recommend a high fiber diet. If patients have pre-existing heart disease, serial EKGs may be advisable as well as frequent monitoring of blood pressure during the first several weeks of treatment.

Duration of antidepressant treatment should be at least one year after a remission of symptoms has been achieved, and patients may then be tapered off over a period of 1 to 2 months and carefully monitored for relapse. Patients who have a history of recurrent depression or depression marked by obsessional, psychotic, or suicidal behaviors should be monitored by a psychiatrist.

In patients who are exceedingly frail, debilitated, or with severe heart disease (usually cardiac conduction problems), prone to orthostatic hypotension, or who fail to respond to a therapeutic trial of cyclic antidepressants, consideration for electroshock treatment (EST) should be given. Psychotic depressed patients and patients who are imminently suicidal should also be considered for EST. EST, using thiopental for sleep induction and succinylcholine for muscle relaxation, is a much *safer* form of treatment than cyclic antidepressants in high-risk, medically complicated patients.[13] EST should be performed on high risk patients with an anesthesiologist in attendance.

"The presence of pre-existing cognitive deficits, whether due to early Alzheimer's disease or a multi-infarct/cerebrovascular dementia should not deter clinicians from treating depression in elderly patients."

While primary care physicians may choose to treat the majority of their elderly patients initially, those who should be referred for psychiatric evaluation include (a) any patient with suicidal ideation, psychosis, paranoia, or obsessional behavior; (b) patients who need extended individual, marital, or family therapy as part of their treatment; (c) diagnostic dilemmas, particularly if dementia or evidence of personality disorder is present; (d) patients whose mood disturbance fails to respond to an adequate trial of antidepressants, or where higher than usual doses may be required.

Summary

A general diagnostic and treatment approach to the elderly patient suspected of concurrent dementia and

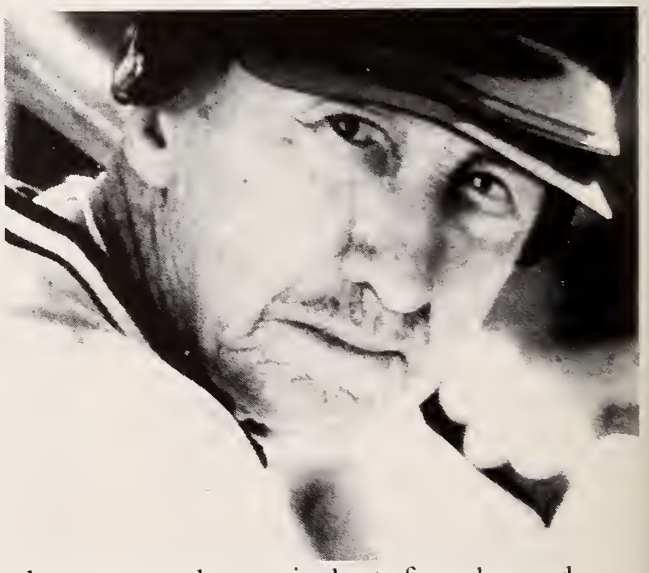
depression is presented in Table 5. A significant number (5% to 10%) of elderly patients who are evaluated for symptoms of dementia will have underlying medical conditions that are potentially treatable, resulting in improved cognitive functioning. If depressive illness is detected, even in the presence of underlying dementia, marked improvements in mood, social, and even cognitive functioning can often be achieved with effective treatment of the depressive component of the patient's condition. We are currently conducting longitudinal studies in the geriatric population to quantify these improvements in cognitive functioning as well as attempting to identify clinical predictors of treatment response.

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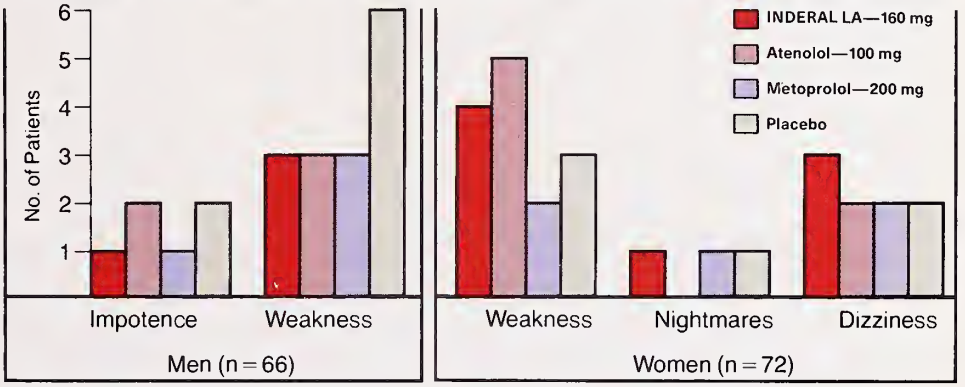
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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia

Hematologic: Leukopenia; agranulocytosis; thrombocytopenia; aplastic anemia

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever, respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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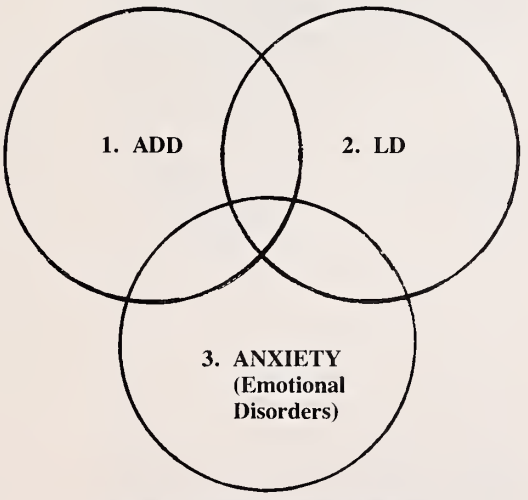
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LEARNING PROBLEMS IN CHILDREN AND ADOLESCENTS

STEVEN L. JAFFE, M.D.

SCHOOL AND learning difficulties are among the most common problems of young people. Numerous theories and "fad" treatments confuse parents, teachers, and doctors. This paper will present a conceptual framework which helps to organize and categorize these problem areas. Treatment approaches can then be more focused and appropriate.

The following three overlapping circles represent the major diagnostic categories that cause school and learning problems:



ADD = Attention Deficit Disorder
LD = Learning Disability

These diagnostic categories apply to children within the normal I.Q. range.

The circle entitled ADD represents the population of children who have the clinical symptoms of Attention Deficit Disorder, i.e. short attention span, distractibility, impulsivity, and emotional lability.[1] While previously called hyperactivity or hyperkinetic syndrome, the name was changed because the attention span defect is now considered the basic symptom. Motor hyperactivity may or may not be present. These children are highly distracted by any external stimuli, and any peripheral noise disrupts their concentration.

A dysfunction in the filtering mechanism of the reticular formation is hypothesized to be the basic neurophysiologic defect. Aggressive behavior associated with ADD is a sign of poorer prognosis. A decade ago, most thought that ADD resolved with the onset of puberty. Recent follow-up studies demonstrate that most ADD children become ADD adolescents and even ADD adults.[2] Children and adolescents with ADD have difficulties in school work and problems in learning because of difficulty concentrating and paying attention. Diagnosis is made on clinical grounds from

Dr. Jaffe is Director, Adolescent Programs, CPC-Parkwood Hospital and Associate Professor of Psychiatry, Emory University. Send reprint requests to him at 6667 Vernon Woods Dr., Atlanta, GA 30328.

careful evaluation of the child's developmental history (including psychological, cognitive, and neurological lines), family and individual psychiatric interviews, and information from school observations. Distractibility varies with the degree of external stimuli, so little attention span difficulty may be observed in a 1:1 interview. Treatment of ADD may involve smaller, more structured classrooms, behavior modification, and cognitive therapy techniques. Sixty to seventy-five percent of children with ADD will respond positively to stimulant medication (methylphenidate or amphetamines) with an increase of attention span and decrease of distractibility.[3] Adolescents with ADD will similarly have a positive response.[4] The Feingold diet has been helpful in only 5% of ADD children.

The second circle represents the population of children that have learning disabilities (LD). These children have specific problems in the way their brain processes information. Information for learning comes in through the visual and/or auditory spheres. It enters the central nervous system where numerous processes must occur which include: attributing meaning to the stimuli, relating the information to previously stored information (immediate, recent, and remote memory), and sequencing the material. Information is then organized for output through either language or motor behavior.

INPUT	CENTRAL PROCESSING	OUTPUT
Visual perception	**Meaning (Comprehension)**	**Language**
Auditory perception	**Integrating**	**Motor**
	Sequencing	
	Memory	
	immediate	
	recent	
	remote	

A specific learning disability is a significant weakness in one or more of the above areas. Thus, a visual-motor learning disability is a dysfunction in processing information from visual input to motor output (i.e., copying geometric designs). Other types of learning disabilities may include weaknesses in auditory memory, comprehension, sequencing or expressive language. Diagnosis of learning disabilities is made by psychoeducational testing, and treatment involves educational remediation. Stimulant medication does not improve a learning disability.

Approximately 30-40% of children with ADD also have learning disabilities.[5] Stimulant medication may improve the attention span of these children (the ADD component) and make the LD more accessible to remediation. These children with both ADD and LD have a double disability with each making the other worse. The ADD component with lack of concentrating ability makes it difficult for information to enter the brain where specific learning disabilities impair proper processing. Many children have ADD with no LD and only require help with attention span. Others have only an LD with no attention span problem. Making separate diagnostic evaluations of whether ADD does or does not exist and whether a specific learning disability does or does not exist allows proper treatment planning.[6]

The third circle represents children with emotional disorders. Children with acute or chronic anxiety disorders or with depressive disorders will have difficulty with concentrating and learning. These disorders need to be considered as they are treated by very different modalities such as individual/family psychotherapy and/or antidepressant medication. Stimulants will usually worsen these symptoms. With adolescents, substance abuse must be considered and often is missed as a cause of chronic school difficulties.

"While previously called hyperactivity or hyperkinetic syndrome, the name was changed because the attention span defect is now considered the basic symptom. Motor hyperactivity may or may not be present."

Chronic pot smoking is a common cause of problems with school concentration. A modified urine drug screen can help substantiate the diagnosis of substance abuse.

The overlap of this third circle with the circles of ADD and LD happens because emotional conflicts and anxieties make the symptoms of ADD and LD worse. An optimal amount of anxiety increases attention and motivation. Excessive anxiety in "normal" children and adolescents decreases concentration and increases distractibility. Excessive anxiety in children with ADD and/or LD will further decrease the poor attention span of the ADD and further impairs the processing problems of the learning disability. Thus, ADD/LD children are more vulnerable to emotional conflict and stress. During stressful periods, such as parental divorce or rejection, the ensuing increased anxiety in the child will exacerbate the child's ADD/LD symptoms.

Another reason for the overlap of the third circle is that ADD/LD children may develop anxiety and depressive symptoms because of chronic school failure. Here, the psychiatric symptoms are secondary to the ADD/LD.

These three overlapping circles are presented in a conceptual framework for separately considering whether a child does or does not have attention deficit disorder, specific learning disability, and emotional disorder. Any child may have one or more diagnosis. Each intensifies the symptoms of the other. Thus, an ADD child will have more difficulties with school if he also has an LD. If there is family discord, this anxiety will make the attention span problem of the ADD and the processing problem of the LD worse. These increased symptoms will cause more difficulties at school which leads to failure and low self-esteem. These contribute to decreased motivation and negative attention seeking behaviors. A very confusing clinical picture evolves. Considering each disorder as a separate entity and then as a reverberating influence to the others helps to tease apart the problem areas and to develop specific multiple treatment approaches.[7]

"A dysfunction in the filtering mechanism of the reticular formation is hypothesized to be the basic neurophysiologic defect."

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BEYOND DEINSTITUTIONALIZATION —

Taking stock of the gains and costs

It has been a quarter of a century since an act of Congress and the first of the long series of judicial decisions began a long series of administrative and political actions that deinstitutionalized the mentally ill. The Congressional action was the creation of the Community Mental Health program which inaugurated a revolution in the public mental health care system. The past several years have been a time for stock-taking, evaluating the gains and costs of these momentous changes.

An Historical Perspective

As in most major social shifts, the reasons for the changes lay in the confluence of a number of factors. The public responsibility for the care of the mentally ill, accepted gradually state by state and nationally in the mid-Nineteenth Century, had resulted by the mid-Twentieth Century in the wholesale warehousing of hundreds of thousands of tortured incurable souls across the nation, scandalized by Albert Deutsch in the 1950s in "The Snake Pit." An aroused public was appreciative of the reform efforts that followed in the state hospitals when provisions of better budgets allowed social rehabilitation, psychoeducation, and new approaches in psychotherapy to demonstrate that many severely and chronically mentally ill patients were not hopeless. With the advent of tranquilizers after 1954, it suddenly became possible to induce amazing remissions, and Active Treatment became the standard to replace Custodial Care. In states that failed to upgrade their program budgets, civil rights-to-treatment suits brought about judicial pressures that mandated either upgrading hospital standards or closing them down. These events coincided closely with ever-mounting fiscal pressures on state governments not only to fund Active Treatment as well as chronic care but also to have to maintain and replenish rapidly aging and deteriorating state hospital plants, when the need for them in the future was hard to quantify, but seemed likely to be much less. Added to all these trends — medical, ideologic, fiscal, legal, and administrative — was a strong movement called Social Psychiatry that sought to prove that a great deal of manifest chronic illness could be changed by adequate provision of improved general living circumstances through social advocacy vis-à-vis the established bureacracies for legal, financial, housing, and educational services along with the traditional mental health therapies. With the national radicalizing of commitment laws in the 1970s, the state hospitals were emptied to fractions of their former sizes, and deinstitutionalization was complete.

The Third Quarter of the Twentieth Century was a time of great optimism for social progress generally, as well as general affluence and heightened public education. The affluence permitted this country to afford a "crisis of the spirit" that sought liberation from any and all restricting social bounds. Even the idea that mental illness was a myth, an artifice of many pernicious, subtle, unconconscious repressive forces in individuals and institutions, ran rampant. Social Psychiatry and the Community Mental Health Centers (CMHC) to which state funds were diverted hoped to replace

"Very often the difference between relapse (and readmission) or progress lies with the quality and continuity of progressive care in the outpatient programs, but this, in turn, depends on the adequacy of funding provided by the states and counties."

Dr. Smarr is Medical Director of Psychiatry, Memorial Medical Center, Inc., Savannah. Send reprint requests to him at P.O. Box 23089, Savannah, GA 31403.

WHERE ARE THEY NOW?

ERWIN R. SMARR, M.D.

associated with deinstitutionalization.

the state hospital system with treatment that was more rational, humane, dignified, and effective. The Fourth Quarter of this Century is a time for evaluating the change, a process that should have been done concomitantly with the change itself, as many professionals said at the time, but which was not done.

"The CMHCs have the burden of picking up the active treatment responsibilities, but certain features that handicap them from fulfilling that promise were built into their structure historically."

By far the most obvious effects have been the achievement of the major goals in large measure. In Savannah, on October 11, 1985, a major program on the effects of deinstitutionalization was sponsored by the Coastal Georgia Psychiatric Society, Memorial Medical Center, Inc., and the Mental Health Association. The keynote speaker was Paul Fink, M.D., of Philadelphia, Vice-President of the American Psychiatric Association, who spoke very knowledgeably of the situation across the country. All agreed that vast numbers of people have benefitted, and no one wished to go back to the "old days" of state hospital psychiatry. But it is also well known to all professionals in this field, and even better known to the myriads of families of mentally ill people, that the present care system is a far cry from what it needs to be.

It should have been obvious to the designers of deinstitutionalization, although apparently it was not, that vast hordes of mentally ill patients would be either unadaptable to living with their families without extensive continuing professional help or would be homeless if unadaptable to the boarding home environments provided. Even though states tried to provide funding for enough boarding houses and personal care homes, for over a decade the cities for our country have been filled with hundreds and thousands of street people, about 30 to 50% of whom are chronically ill mental patients, not sufficiently dangerous to themselves or others to meet the new restrictive criteria for commitment. When interviewed, most of these people don't want to live in the boarding homes — they often prefer the streets. In the cold wintry nights of the north every winter, a certain number of them die with their rights on. In one city after another, heroic efforts, after many years' delay, struggle for the means to at least provide overnight shelters for these street people. Money for this purpose was never included in either federal or state CMHC budgets.

Consequences of the Revolving Door Syndrome

The Age of the Tranquilizer, in the late 1950s and 1960s, made the already familiar "Revolving Door Syndrome" more common at mental hospitals. Seldom an actual cure, the neuroleptic drugs brought about symptomatic remissions of psychotic illness, enough to permit discharge to the community, but with the patient still vulnerable to relapse under conditions of emotional stress, failure to maintain dosage, or for other reasons. Very often the difference between relapse (and readmission) or progress lies with the quality and continuity of progressive care in the outpatient programs, but this, in turn, depends on the adequacy of funding provided by the states and counties. Before deinstitutionalization, the state hospital staffs often knew quite well what the tolerance levels of all their patients and their families were for coexistence outside the protective structure of the hospital, and arranged the timing of passes and home visits to optimize their success, prepared to have the patients return for variable lengths of time if necessary to insure the safety of all concerned. Now, patients may be treated only in the "least restrictive environment" medically necessary. State hospital capacity has been

drastically cut, and patients, when readmitted, revolve faster and faster through that door. Frequently, they stay a week or less, only long enough to lose their most frightening subjective symptoms, but no more prepared to cope with outside life than before.

"Deinstitutionalization has brought the chronically mentally ill to the Main Streets of America, out of the rural refuges of asylum and storage, to the sidewalks and garbage bins of downtown, to the storefronts, jails, and steam vents."

The CMHCs have the burden of picking up the active treatment responsibilities, but certain features that handicap them from fulfilling that promise were built into their structure historically. Large cities' CMHCs were originally funded with seed money from the federal government, supposed to be gradually withdrawn and picked up by the states and counties over an 8-year period. That period had to be drawn out much longer because the states and counties could not fill the gap, but eventually the federal money ended. Originally, the CMHCs were supposed to phase in all the services necessary to accomplish their mission, which included not only provisions for acute in-patient and out-patient treatment, but also case management and continuity of care, partial hospitalization (day and night hospitals), vocational and education rehabilitation, and necessary family therapy and counseling, along with social advocacy for housing and financial support. Many of these services never developed, or developed only to token extents. Sometimes regulations specify that services, such as day-hospital, must be directed towards the sickest patients, which make them unsuitable for higher functioning patients who are struggling to be more productive but cannot make it without partial hospitalization, so they relapse through the revolving door again. The cheapest way to provide care is in a hospital already built and staffed, regardless of whether that is the care a patient most needs at the time. Even though carefully controlled studies have shown that Partial Hospitalization can be as effective for acute treatment as In-Patient care at about one-third the cost, states and even private insurance planners have consistently failed to arrange the reimbursement programs to establish Partial Hospitalization in many counties. The victims of this are the patients and their families, who have to live on an all-or-nothing basis.

The Revolving Door system has another drastic impact on community hospitals, whose general psychiatric units may serve for the acute treatment phase of relapse. This is exemplified in Savannah, where the Georgia Regional Hospital of 250 beds is supposed to serve an intermediate and long-term treatment role, and Memorial Medical Center's (MMC) Clark Pavilion provides Acute Treatment for all, including those who are covered by Medicaid, Medicare and Chatham County indigents. The revolving door rotates so fast that both hospitals are kept maximally full, to the extent that the Regional Hospital is so busy serving acute needs that it is hard-pressed to take long-term cases in transfer from Memorial Medical Center. MMC in turn becomes so impacted with long-term chronic cases who cannot be discharged because of homelessness (and cannot get Medicaid without an official address) or because of prolonged waits for a nursing home, that its capacity to admit acute cases is limited, having to refer them back into the Regional Hospital. Neither hospital is then able to provide properly the acute or longer-term care for which they were intended. While this Regional Hospital overcrowding may not be uniform throughout the state, nonetheless it has been said that last year most of the states' Regional Hospitals were running about 105% of census capacity. In Savannah, the overstuffing and understaffing recently caused the Regional Hospital to lose its Medicare accreditation, which can not only impact still further on the community and Clark Pavilion, but may affect the state's Medicaid licensure to Regional as well. The "System" will back up further.

"Technical advances in the neurosciences and psychopharmacology as well as statistical research techniques have led in the 1980s to major emphasis on the medical disease models of mental illness, with its accompanying genetic correlations."

It becomes all too apparent how the Mental Health Care System is truly a System — all the parts affect each other, and the whole cannot be better than its weakest part. This became so apparent in October, 1985, that a prime need was seen to have some overall coordinating body locally which would identify the principal barriers to effective care in the community and try to facilitate their resolution. A Consortium of Mental Health Agencies was formed and has met monthly with representatives of each of the principal agencies, together with the Mental Health Association and the Alliance for the Mentally Ill. It is beginning to make a non-system into a genuine system of continuity and has already achieved a greater degree of understanding and mutuality of concern and effort.

In this city there are between 50 and 100 homeless mentally ill and a

shortage of 300 housing units for the homeless. During 1985, a Community Coalition for the Homeless organized and attempted unsuccessfully to get an initial HUD grant to acquire some units. The problem of housing was chosen by the Consortium as the prime system problem, since it is key to the dischargeability of patients and their stability in the community. The CMHC, at the same time, is trying to get the Georgia DHR to fund a pilot program of outreach staff who would provide the necessary supervision in the initial housing units. On October 8, 1986, the second annual conference will be held to review the progress to date and generate further ideas.

Communities differ in the particular features by which they have succeeded or fallen short in achieving the goals of deinstitutionalization. Savannah may not be typical in all respects, but it does demonstrate some definite ways in which deinstitutionalization is only a very qualified success.

"With the advent of tranquilizers in 1954, it suddenly became possible to induce amazing remissions, and Active Treatment became the standard to replace Custodial Care."

The federal support for CMHCs is now gone, but mental illness is no myth. States and counties are on their own. A study done last year by the Georgia Psychiatric Society showed that Georgia has maintained the funding of its out-patient programs at the same level, without federal support, but that in this state in-patient admissions have steadily increased without any increase in public funding. In some areas of the country, CMHCs, lacking sufficient county support, have been put in the position of having to attempt to compete with private practice for the insurance-covered patient clientele, which then requires that they staff and gear their programs less towards the sickest, most impaired and needy, whose reimbursement is least.

Some Solutions

The patients are still quite sick, and so is the System. We live now in an era of defederalization, with emphasis on private enterprise rather than public programs, local volunteerism rather than government support. The stigma against the mentally ill takes many forms, usually culminating in neglect and repression, and can easily continue. The Adminstration has proposed that Medicaid be reduced (capped), Medicare cut, and certain mental health programs eliminated. Social services, cut in 1981, may well be reduced further.

Deinstitutionalization has done one dramatic thing: it has brought the chronically mentally ill to the Main Streets of America, out of the rural refuges of asylum and storage, to the sidewalks and garbage bins of downtown, to the storefronts, jails, and steam vents. What to do with them now?

Fortunately, the answers are not that difficult to see.

1. State and county effort, and money, must be directed towards providing housing units where they are lacking for mental patients.
2. State and county programs to staff supervision of these units and other residential units, such as personal care homes, must be provided for the CMHCs.
3. Partial hospitalization programs have to be funded and staffed primarily aimed towards patients with potential capacity for significant rehabilitation and productivity.
4. Better coordination needs to be achieved between the public CMHC and the talents of private sector psychiatry, through revision of policies that restrict participation and reimbursement of the private sector, isolating the two systems and restricting private services to minimal types of care.
5. Federal legislation is needed to reduce the mutually exclusive and competing jurisdictions of funding that regulate the services available by patients and to prevent the money-flow from following the patient.

"Deinstitutionalization has not saved money: the costs are about the same as before, just dispensed differently for different purposes."

As regards the last point, legislation has been introduced to Congress in 1985 and 1986 to accomplish these ends:

The Homeless Persons Survival Act of 1986, by a coalition of 18 organizations

The Protection and Advocacy for Mentally Ill Individuals Act of 1986 (Public Law 99-319)

Vocational Rehabilitation Admendments of 1986 H.R. 4021

Section 1619 of the *Social Security Act (P.L. 98-460) Extension 1984 Improvements — S 2209 & H.R. 4450*

State Comprehensive Mental Health Services Plan Act of 1985, S 1744

Housing for Chronically Mentally Ill Act of 1985, S 1743, H.R. 4325

The Adult Foster Care Equity Act, 1986 H.R 4321

The state of Georgia this year enacted a revision to the Mental Health Code (Act 1554), establishing conditions for commitment to out-patient treatment. This will help to maintain some patients on their medications, but the failure to do so will still result in rehospitalization. Even for those patients who cooperate, the incompleteness of out-patient services will be highlighted still more. The key to further reduction of in-patient fundings is amplification of out-patient

funding. Systems that simply split two-thirds of a pie in half wind up with both halves operating with one-third. The public should not be misled that they have done right by the mentally ill by simply returning them to the communities.

Summary

The Seventies were the Psychosocial Era. Presently we are in the Biologic Era of psychiatry: technical advances in the neurosciences and psychopharmacology as well as statistical research techniques have led in the eighties to major emphasis on the medical disease models of mental illness, with its accompanying genetic correlations. While this is socially, politically, and economically comforting, it tends to make people forget the insights of the previous era, and the fact that in the day-to-day treatment of patients, total biopsychosocial methods are still just as necessary, while we await the drugs that will truly cure. When that day comes, we will be able to do away with the expensive services that decent treatment requires, now that these hundreds of thousands of people will have been restored to membership in the human race. Deinstitutionalization has not saved money: the costs are about the same as before, just dispensed differently for different purposes. It is a cruel travesty of mercy to give them this "liberation" in half measure, without completing the transformation.

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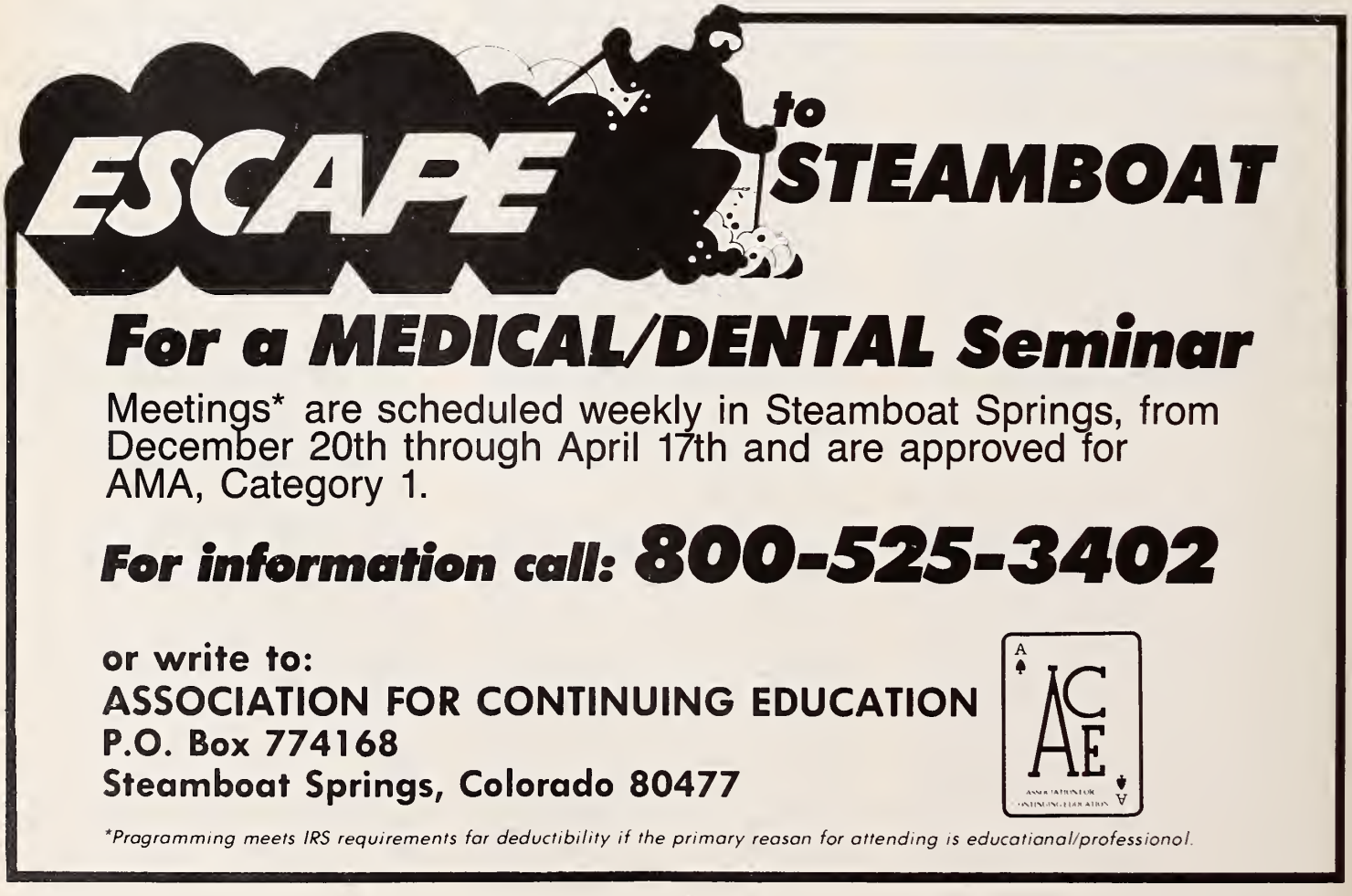
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CATATONIC SYNDROMES IN MEDICINE AND PSYCHIATRY

ANNE MARIE RIETHER, M.D., ALAN STOUDEMIRE, M.D., GAIL ANDERSON, M.D.

A review of clinical presentations and differential diagnosis.

Abstract

Catatonic symptoms may be seen in a variety of medical, neurologic, and psychiatric conditions. This article reviews the clinical presentations of catatonia as well as its medical and psychiatric differential diagnosis. Special attention is given to the recognition and treatment of two medication-induced catatonic reactions: neuroleptic-induced catatonia and the neuroleptic malignant syndrome.

Introduction

CATATONIA is a non-specific symptom complex, elements of which may be observed in a wide spectrum of medical, neurologic, and psychiatric illnesses.[1] In addition, the catatonic symptoms may be a consequence of neuroleptic (phenothiazines, antipsychotic, major tranquilizer) drug reactions, such as neuroleptic-induced catatonia and the neuroleptic malignant syndrome.[2, 3] This paper will review the differential diagnosis of catatonic states, particularly those such as seen in depression, medical disorders, and drug reactions that are likely to be observed in general hospital and primary care settings.

The syndrome of catatonia as classically described by Kahlbaum consisted of catalepsy (waxy flexibility), negativism, mutism, stereotypical behavior, bizarre posturing, muscular rigidity, and verbigeration (the senseless repetition of words and phrases).[4] Kraepelin, one of the fathers of descriptive psychiatry, included catatonia as a subtype of dementia praecox (schizophrenia).[5] Bleuler also described catatonic reactions in schizophrenia.[6] Since these original descriptions, catatonic signs and symptoms have been classically associated with schizophrenic reactions, but, as will be noted below, great care should be used in attributing catatonic signs or symptoms to schizophrenia, since elements of catatonia may be seen in a variety of medical and neurologic disorders including drug reactions.

From the Department of Psychiatry, Emory University School of Medicine. Send reprint requests to Dr. Stoudemire, Director, Medical Psychiatry Unit, Section of Psychiatry, Emory Clinic, 1365 Clifton Rd., Atlanta, GA 30322.

Medical and Neurologic Differential Diagnosis

Catatonic signs and symptoms may be a sign of a life-threatening organic brain syndrome. Table 1 lists the major medical and neurologic conditions that have been reported in the literature that have presented predominately with catatonic signs and symptoms. While not all patients described with these medical conditions may manifest the full catatonic syndrome, all patients may potentially present with some elements of catatonic behavior that could be potentially mistaken as "psychiatric" or "functional" in nature. Even if a patient has a documented history of schizophrenia, a careful medical evaluation should be performed to rule out an underlying organic condition contributing to their catatonic behavior.

Of particular interest in the medical differential diagnosis of catatonia is the possibility of viral encephalitis, which may present in its prodromal stages with psychotic and catatonic behavioral symptoms.[7] Herpes encephalitis, in particular, has a predi-

Table 1 — Medical and Neurologic Differential Diagnosis of Catatonia

Neurologic conditions
Basal ganglia disorders (anteriosclerotic parkinsonism, focal lesions of the pallidum)
Disorders of the limbic system and temporal lobes (viral encephalitis, vascular lesions of the temporal lobes, tumors)
Diencephalon disorders (tumors, hemorrhage in the third ventricle, focal thalamic lesions)
Other lesions and disturbances (frontal lobe tumors, anterior cerebral artery aneurysms, diffuse brain trauma, petit mal epilepsy, postictal states, Wernicke's encephalopathy, narcolepsy, intracranial hemorrhage, cerebral cortex infarctions, subdural hematomas)
Metabolic conditions
Diabetic ketoacidosis
Hypercalcemia
Pellagra
Acute intermittent porphyria
Hepatic encephalopathy
Toxic agents
Phencyclidine (PCP)
Organic fluorides
Mescaline
Ethanol
Pharmaceutical agents
Neuroleptics (neuroleptic malignant syndrome, neuroleptic-induced catatonia)
Metoclopramide (Reglan)

"Catatonic signs and symptoms may be a sign of a life-threatening organic brain syndrome."

lection for invasion of the limbic-temporal lobe areas of the brain, leading to frequent psychiatric symptoms incuding psychosis.[8] In addition, the cerebrospinal fluid (CSF) may be essentially unremarkable in the very early stages of this catastrophic condition.[9] The CSF glucose may be normal or low, and CSF protein may be normal or as high as 250 mg/dl. On close medical evaluation, however, all patients will display clinical evidence of encephalopathy and will have an abnormal EEG.

The diagnosis of viral encephalitis will rarely, if ever, be missed if careful attention is given to the review of symptoms pertinent to the prodromal phases of a viral infection (lethargy, headache, fever, photophobia, nausea, vomiting) and attention is given to a mental status examination to detect signs of an organic brain syndrome (disorientation, confusion, memory problems).

Illicit drug abuce may also cause catatonic reactions, particularly the use of PCP (phencyclidine or "angel dust"). These patients may present with acute psychosis which are often characterized by aggressive, violent, paranoid, and impulsive behavior. On physical exam, patients may not only exhibit catatonic behavior but also may show signs of autonomic instability, myoclonic jerking, muscle rigidity, pinpoint pupils, and vertical and rotary nystagmus. PCP reactions may also be observed in marijuana smokers, since some marijuana may be "laced" with PCP for its hallucinogenic effect leading to psychotic reactions. The incidence of PCP use in the United States has increased significantly in the past several years.

Iatrogenic Catatonia: Neuroleptic Induced Catatonia and the Neuroleptic Malignant Syndrome

Physicians may inadvertently induce catatonia in general medical settings through the use of phenothiazine agents to control agitated behavior. Elderly patients and those with preexisting neurologic conditions may be at risk for profound extrapyramidal side effects from the phenothiazine-like medications. While drug-induced pseudo-Parkinson's syndrome is rel-

atively common in patients treated with phenothiazine agents (resting tremor, cogwheel rigidity, bradykinesia, festinating gait, drooling, mask-like facies), some patients may experience profound motor inhibition to the point of complete immobility and appear dazed and mute.[10] This profound drug-induced state has been termed "neuroleptic induced catatonia" and if not recognized as such, may lead to a variety of life-threatening medical complications such as aspiration, pneumonia, dehydration, and thrombophlebitis. The syndrome tends to be more common with the "high potency" neuroleptic agents such as haloperidol (Haldol), thiothixene (Navane), and fluphenazine (Prolixin). The syndrome may also occur with Reglan (metoclopramide). Reglan may also cause Parkinsonian symptoms as well. In contrast to the "cogwheeling" rigidity of Parkinson's disease, these patients may have a "copper pipe" rigidity on physical examination.

Neuroleptic-induced catatonia responds best to the dopamine augmenting agents, amantadine (Symmetrel) 100 mg b.i.d. The condition does not respond well to standard anticholinergic treatments such as benztropine mesylate (Cogentin) or trihexiphenidyl (Artane).[11] The syndrome of neuroleptic-induced catatonia may take 2 to 4 weeks to resolve even after neuroleptics are stopped and amantadine treatment is initiated. If neuroleptic agents must again be used, drugs such as chlorpromazine (Thorazine) or thioridazine (Mellaril) which cause fewer extrapyramidal symptoms, should be used in the lowest possible doses.

Neuroleptic Malignant Syndrome

Neuroleptic malignant syndrome (NMS) is a potentially fatal reaction to neuroleptic agents that is characterized by hyperthermia (up to 106°F), muscle rigidity, tachycardia, diaphoresis, blood pressure lability, and profound stupor and often catatonic behavior. The syndrome may be preceded by severe extrapyramidal symptoms similar to those of neuroleptic-induced catatonia, and a variety of dystonias and dyskinesia symptoms may also occur. The syndrome is most commonly observed following treatment with "high potency" antipsychotics such as haloperidol (Haldol), fluphenazine (Prolixin), and thiothixene (Navane). The syndrome may occur on an idiosyncratic basis, even if the patient has been previously safely treated with neuroleptics. The syndrome may also occur following the sudden withdrawal of anti-Parkinsonian drugs such as L-DOPA.

> ***"Physicians may inadvertently induce catatonia in general medical settings through the use of phenothiazine agents to control agitated behavior."***

The syndrome may last 10 to 14 days even after oral neuroleptics have been discontinued. If depot intramuscular (steroid vehicle) neuroleptics have induced the condition, symptoms may persist for over 30 days. The mortality rate may be as high as 20%.[3] A variety of laboratory abnormalities may be seen in neuroleptic malignant syndrome including leukocytosis and elevations of liver enzymes, but elevations in serum CPK levels (in addition to myoglobinuria) have been observed in practically all cases and appears to be a sensitive test for the condition.

Since NMS is thought possibly to be caused by blockade of dopamine receptors in the anterior hypothalamus involved in thermoregulation,[12] dopamine augmentation with bromocriptine (a dopamine agonist) 5 mg TID or QID has been reported to ameliorate the condition.[13] The dopamine theory of NMS, however, does not completely explain the etiology of the syndrome, since dantrolene sodium, used in anesthetic-induced malignant hyperthermia, also has reversed the condition. This indicates peripheral mechanisms at the cellular membrane level, probably involving abnormal calcium release and transport leading to prolonged muscle contraction and heat generation. Doses of intravenous dantrolene 0.25 mg/kg I.V. q6H acutely may be repeated to control fever and rigidity. Patients may be treated with oral dantrolene 50 mg q6H orally when stable.[14]

The essential component of treatment of NMS, however, is early recognition of the syndrome and immediate discontinuation of neuroleptic agents. Vigorous supportive therapy such as cooling blankets and hydration are essential, particularly in preventing pulmonary and renal complications. The syndrome may reoccur upon reintroduction of neuroleptic agents. If antipsychotic medications are absolutely necessary, agents such as molindone (Moban) or thioridazine (Mellaril) are probably the safest drugs to try initially. Patients should be kept under close observation, be well hydrated, and have their temperature, vital signs, and serum CPK levels monitored for the first 2 weeks of treatment. There is little information available in the medical literature regarding the frequency of recurrent NMS following reintroduction of neuroleptic agents, although patients who have had one episode of NMS are believed to be at high risk for recurrent episodes.

Psychiatric Disorders and Catatonia

As noted earlier, Kraepelin classified catatonia as a form of dementia praecox, but since the early twentieth century there has been a continued debate regarding the nosology of catatonia.[15, 16] It has been argued that many of these patients may now have affective (depression, bipolar, or manic-depressive illness) rather than schizophrenic disorders. Kraeplin noted that 47% of "catatonic attacks" begin with a depressive phase. He distinguished catatonics from other

patients with dementia praecox by their recovery rate, which he found to be nearly 30%. Kirby first specifically suggested that there was a mood disturbance associated with catatonia and reported in a classic study of five women who developed a catatonic syndrome within the course of a manic-depressive illness.[17] Bleuler felt that the symptoms found in catatonics were mixed, so that he spoke of a "manic" or "melancholic" catatonic.[6] He required the four "A's" (autism, ambivalence, loose associations, and disturbances in affect) before placing the schizophrenic label on a catatonic patient. In 1936, Bonner and Kent found similarities between the two diagnoses and drew parallels between manic excitement and catatonic excitement.[18]

> ***"The essential component of treatment of neuroleptic malignant syndrome is early recognition and immediate discontinuation of neuroleptic agents."***

In 1973, Morrison delineated "excited catatonics" and "stuporous catatonics."[19] He felt that 30% of the excited catatonics could be classified as having a mood disorder, mostly of the manic type, and 10% of the stuporous catatonics could be called depressed. Abrams and Taylor studied 55 patients who had at least one catatonic feature, and subsequently diagnosed them according to formal research criteria.[20, 21] They felt that over two-thirds of their study patients had affective mood disorders, usually mania, and only four clearly were schizophrenic. The Diagnostic and Statistical Manual of the American Psychiatric Association, however, places catatonia only as a form of schizophrenia.[22] This diagnostic manual requires incoherence, catatonic behavior, and a decline in functioning to make the diagnosis of "schizophrenic disorder, catatonic type."

Catatonia wich hyperthermia also may be observed as part of acute schizophrenic psychosis. This condition, alternately called "Stauder's lethal catatonia," lethal catatonia, catatonic delirium, and a variety of other designations was described in the pre-phenothiazine era and therefore can occur independently of antipsychotic medications. The hyperthermia is probably caused by a central hypothalamic dysregulation. Dehydration may be a risk factor for the development of the condition.

The treatment of catatonia has rarely been specifically addressed in the literature. Medunna's first use of convulsive treatment in 1934 was in a catatonic patient. He reported on a man who had been in a catatonic stupor for 4 years. After the fifth camphor injection, the stupor dramatically resolved. In review articles on ECT, catatonia is cited as an indication for this treatment.[23-25] In general, ECT is a more rapid, safe, reliable, effective treatment for catatonic behavior — particularly those associated with psychotic depression — as compared to drug therapy. Care should be given in using neuroleptic agents in this population since, as noted above, neuroleptics may themselves cause or exacerbate catatonic symptoms.

Summary

Catatonic signs and symptoms may occur across a variety of psychiatric and medical conditions. Prior to psychiatric referral, the primary care physician should perform a careful medical and neurologic evaluation of the patient to rule out an organic cause of the condition. Particularly in the elderly and patients with neurologic conditions that have been treated with phenothiazine-like drugs or Reglan (metoclopramide), consideration should be given to the possibility of neuroleptic-induced catatonia, and in the presence of fever and muscle rigidity, the neuroleptic malignant syndrome. If patients are thought to be suffering primarily from psychiatrically based catatonia, then the possibility of a psychotic depression should be given careful consideration.

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Drug Interactions: The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.
Usage in Pregnancy: Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Nonteratogenic Effects: Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.
Labor and Delivery. Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.
Nursing Mothers. It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.
Pediatric Use: Safety and effectiveness in children have not been established
ADVERSE REACTIONS
Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.
Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.
Genitourinary System: Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.
Respiratory Depression: (See WARNINGS.)
DOSAGE AND ADMINISTRATION: Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.
The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982.

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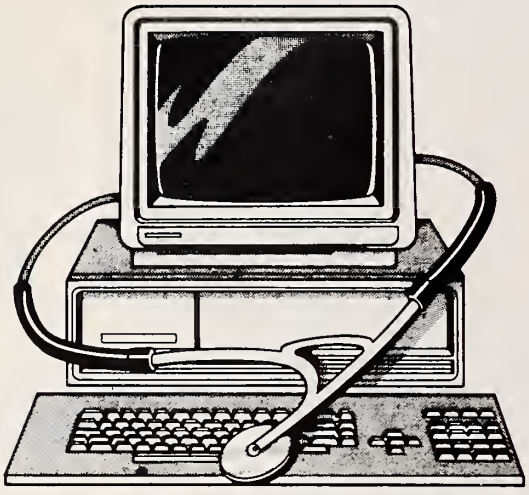
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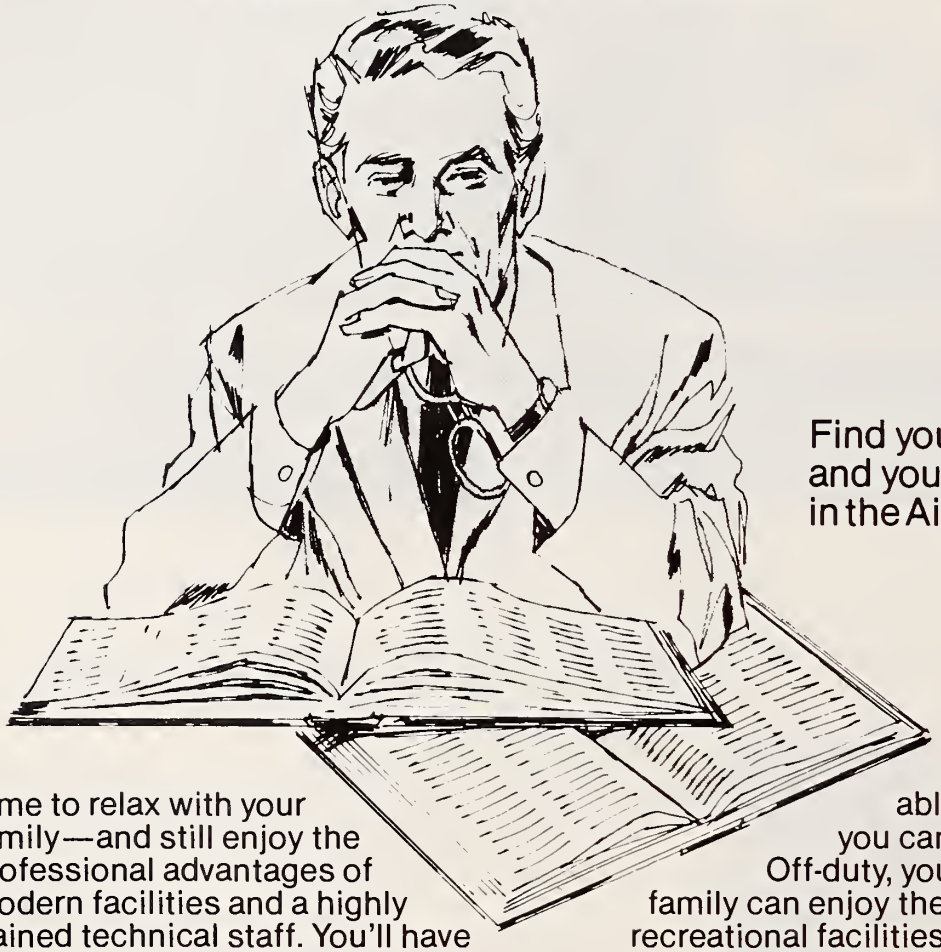
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PSYCHIATRIC MANAGEMENT DURING PREGNANCY

STEVEN R. LEE, M.D.

Abstract

This paper addresses the spectrum of issues present only during this special time in a woman's life. Pregnancy changes a woman's past and future perspectives of herself as well as her relationship with the rest of the family. In times of emotional dysfunction, there are psychotropic medications that can be used with some precautions. Other topics in the psychiatric management of the pregnant woman include the addicted mother, nausea and vomiting, multiple spontaneous abortions without organic etiology, and the postpartum period.

PSYCHIATRISTS in general feel uncomfortable working with a pregnant woman. Many times they take extra precautions and hesitate to be aggressive with the management. Some of this anxiety is secondary to the sparcity of information on the treatment of the pregnant psychiatric patient. This paper will help to provide the information that is known about the psychiatric management of pregnancy.

Recognizing that there are only a few good incidence studies, the more recent ones[1, 2, 3] point out that the amount of psychologic dysfunctioning related to pregnancy is greater than once thought. Somewhere between 16%[1] and 39%[2] of pregnant women have some psychologic dysfunctioning. The incidence postpartum is similar (between 16%[1] and 47%[3]) but probably falls toward the larger number.

In psychotic patients, there is a higher incidence of psychotic episodes postpartum than during pregnancy. In fact, psychotic symptoms during pregnancy in general decrease.[4] Primiparous women are at greater risk than multiparous of having a postpartum psychotic episode.[5] The overall incidence of having a postpartum psychotic episode is 0.2%.[6]

Medications

Whenever a pregnant patient requires medication, the vast majority of the time it is not prescribed because of "the risk of teratogenic effects." The largest fear is physical teratogenicity but also involved is behavioral teratogenicity. Most of the prescribing information contains a caution for use during pregnancy.

Unfortunately, there are not adequate studies to point out possible stress-induced effects on the fetus from mothers who are deprived of their medication during pregnancy. Such factors as tachycardia and high levels of catecholamines may have direct effects on the fetus. Personal neglect to hygiene, nutrition, and physical abuse have some indirect effects.

Most of the better scientific studies involve the use of anxiolytics[7-9] and neuroleptics.[10-12] There seems to be no proof that either class of these drugs causes physical congenital malformations. Many of the reports that suggest teratogenicity include mothers receiving drug combinations and genetic factors which are not accounted for in the study.[13]

The antidepressants[14, 15] and lithium[16, 17] have been studied using poorer scientific technique than the anxiolytics and neuroleptics.[13, 15] There is no proof of physical teratogenicity with the antidepressants, but because of the lack of studies, rare physical teratogenicity has not been ruled out. Lithium has been implicated to cause Epstein's Malformation of the pulmonic valve, a relatively rare malformation. Good control studies are needed.

Whenever possible, try to stop all

Dr. Lee practices psychiatry. Send reprint requests to him at 2150 Peachford Rd., Ste. I, Atlanta, GA 30338.

medication — especially during the first trimester when organogenesis occurs — but if the psychologic dysfunction is such that the patient is having a physiologic response, a medication should be strongly considered. The specific drugs studied that do not have a deleterious effect include chlordiazepoxide, chlorpromazine, trifluoperazine, thioridazine,

"The specific drugs studied that do not have a deleterious effect include chlordiazepoxide, chlorpromazine, trifluoperazine, thioridazine, and fluphenazine hydrochloride."

and fluphenazine hydrochloride.

The possibility of malformations with the anti-extrapyramidal symptom drugs (Congentin, Benadryl, Artane, and Symmetrel), MAO-inhibitors, barbiturates, succinylcholine, and disulfiram can only be speculative, since there are very few studies using even fair scientific technique involving these drugs.

Medications: II. Behavioral Teratogenicity

The term "behavioral teratogenesis"[18] has arisen to describe how some drugs may influence behavioral development. An interference with neurotransmitter function may alter the physical development of interneuronal connections in the central nervous system.[19] The theory seems to have merit but is in need of some good controlled studies. In one such controlled study by Slone, et al,[10] of 1,309 children of mothers exposed to phenothiazines, intelligence quotient scores of children at four years of age were similar to controls.

Lewis[19] gives examples of studies that suggest behavioral lag when mothers were given chlorpromazine but cites an equal number of reports that suggest the opposite. Imipramine has also been implicated as causing behavioral lag.[20]

Electroconvulsive Therapy (ECT)

There are few studies done on the use of electroconvulsive therapy (ECT) during pregnancy and most of the existing studies were done before 1960. It may be that this mode of treatment is actually safer than medications. Since ECT relieves the symptoms of depression faster than medications,[21] ECT could possibly be the treatment of choice, but without good studies we do not know.

Sobel[22] describes his study of 33 pregnancies treated with ECT from 1949 to 1958 and reports no increase in fetal mortality or morbidity over the control group. In Sobel's study, there was only rare occurrence (two cases) of abdominal pain, both cases being in the 8th month of pregnancy, with only one case of fetal damage in a "stormy and toxic" pregnancy. He comments that only five ECT cases had been reported in the first 6 weeks of gestation, and these were without fetal damage.

Remich and Maurice[23] set down some guidelines for consideration for use of ECT in pregnancy:

(1) A thorough physical and pelvic examination should be performed. (In the uncooperative patient, an adequate pelvic examination can be completed under anesthesia before ECT.)

(2) An obstetrician should be a member of the treating team involved in managing electroconvulsive therapy.

(3) High-risk pregnancy should be considered a relative contraindication to ECT. The physician must weigh the benefits and the risks.

(4) External fetal monitoring should be used before and for several hours after ECT (p. 762).

Medications: III. Management Para-Delivery

The majority of psychotropic drugs are depressants of the central nervous system. This is evidenced in the neonate by " . . . somnolence, failure to establish spontaneous respirations, poor feeding, and hypothermia. . . . "[19] Usually the fetal drug concentration is greater than that of the mother because the fetus has a poor ability to metabolize drugs and the fetal plasma proteins bind drugs less strongly, so the tissue-to-blood ratio is much higher than in the adult. All psychotropic drugs are lipophilic, and since lipophilicity determines the speed of placental and central nervous system transfer, all psychotropic drugs gain access to the fetus.

Table 7 describes drugs excreted in breast milk. The following is a review of problems found to be associated with the administration of some psychotropic drugs to women para-delivery.

"Since ECT relieves the symptoms of depression faster than medications, it could possibly be the treatment of choice, but without good studies we do not know."

Concentrations of diazepam and its metabolites may be high enough to be pharmacologically active in the fetus for up to 10 days, explaining the respiratory difficulties, lethargy, and disturbances in thermoregulation associated with the newborn. The sodium benzoate used as a preservative in the injectable form of diazepam displaces bilirubin from albumin, which could lead to kernicterus. This form of the drug should be used with caution in the presence of elevated bilirubin levels in the mother or infant.[24] Mothers in labor should not be given more than 20 mg. of diazepam, and it is not recommended for subchronic use during any stage of pregnancy. Diazepam causes loss of beat-to-beat variability in the fetal heartbeat pattern, which gives a false indication of fetal distress.[25]

Table 1. — Psychotropic Medications Excreted in Breast Milk.[25]

Not In Breast Milk	*Trace Amounts (No Effect On Infant)*	*Small Amounts (Potential Effect)*	*Appreciable Amounts*
amitriptyline	chlorpromazine	haloperidol	meprobamate
imipramine (probable)	thioridazine	chlordiazepoxide	lithium
desipramine	trifluoperazine	diazepam	
nortriptyline (metabolites)	mesoridazine	oxazepam	
	prochlorperazine	chlorazepate	
	tranylcypromine	piperactizine (?)	

Eggermont et al.[26] describe irritability and depression in the neonates of women who had taken imipramine throughout pregnancy. Shearer, et al.[27] comment on one case of urinary retention in the neonate and in the mother from nortriptyline.

The question of phenothiazines producing neonatal jaundice or hyperbilirubinemia is unresolved but has been suggested as has the formation of melanin deposits in the eye. There is also a need to observe the neonate for parkinsonian and extra-pyramidal symptoms as well as other anticholinergic effects.[25] In my experience, however, this has not been a problem.

For those women who can only be maintained on lithium, renal lithium clearance rises during pregnancy and falls quickly postpartum. Follow lithium levels closely during the para-delivery period. Increase the lithium during pregnancy if it is clinically necessary and decrease the lithium to pre-pregnancy dosage at the time of the first contraction to prevent intoxication.[28] Maykay et al.[29] points out that the neonate may be hypotonic or irritable for a few days after delivery, but there are no lingering ill effects. Since there has been one case of reversible goiter, there is a rare possibility of fetal goiter from lithium induced hypothyroidism.[28]

The Addicted Mother

Any mother who has a problem with substance abuse should be aggressively treated. Not only is there interference with bonding but physical dependence always results in withdrawal at some point for the fetus and the mother, resulting in the possibility of uterine contraction and abortion. All addicted mothers should be carefully withdrawn unless the substance is an opiate. If not withdrawn in utero, the fetus may have a difficult withdrawal postpartum.

To be realistic, 99% of the time opiate abusers should be maintained on methadone because of the increase risk of uterine contraction and/or fetal distress during irratic withdrawal. One percent of opiate abusers who are highly motivated, have a short past history of abuse, and have an excellent, stable support system can be withdrawn.

> ***"All psychotropic drugs are lipophilic, and since lipophilicity determines the speed of placental and central nervous system transfer, all psychotropic drugs gain access to the fetus."***

If the mother can be maintained on a methadone level no higher than 20 mg., decrease the dose by 5 mg. every other week. If she is already in a methadone program, it is safer to detoxify between the fourteenth and twenty-eighth week to prevent abortion in the first trimester and fetal distress in the third trimester.[30]

One ounce of absolute alcohol per day causes significant decreased birthweight. One ounce of absolute alcohol twice a week causes a sizeable increase in spontaneous abortions. If a woman drinks enough to be diagnosed an alcoholic, she risks having a baby with a full fetal alcohol syndrome or one or more of the defects of the syndrome (mental retardation, growth deficiencies, etc.)[31]

Psychosomatics

Vomiting during pregnancy can be accentuated by a psychologic component. Obviously, vomiting has a physiologic basis especially during the first 4 months. Leon Chertok[32] feels more specifically that the stimulus to vomiting is not a symbolic attempt to reject the fetus but that it indicates an ambivalent attitude towards pregnancy. Chertok followed 100 primiparous women from the third month of pregnancy until delivery. Of the 68 women who vomited, 79% experienced mild vomiting and 21% more severe; there was no hyperemesis. There was a statistically significant positive correlation between vomiting and an ambivalent attitude towards pregnancy.

I have found that when there is weight loss secondary to the vomiting, a small dose of thorazine (10 mg.) before meals along with, at times, a short hospitalization on the obstetric unit provides relief of the nausea and vomiting, as well as supports the patient during a time when she may feel inadequate to be a mother and ambivalent about the pregnancy. Relaxation training and hypnosis are also effective. Many times nothing works.

In some cases, spontaneous abortion may actually have a psychologic component, which may resolve con-

“There is no proof of physical teratogenic effects from any psychotropic medication, except lithium.”

flicts around a woman reaching full maturity. Of course, before considering such an etiology, it is imperative that the psychiatrist consult the obstetrician to rule out the presence of organic pathology.

Mann[33] reports a 9-year study of over 400 habitual aborters taken from randomly referred women who gave histories of having had at least three consecutive spontaneous abortions. The number of abortions per women in this group ranged from 4 to 13. Each woman was thoroughly evaluated medically and psychologically; therapy was of the more supportive, directive type utilized by many obstetricians. Fifteen percent of the sample had physical abortigenic pathology. Of the 175 physically “normal” aborters, 8 out of 10 successfully carried to term.

Hertz[34] presents a study of nine women with three or more consecutive abortions who were involved in prolonged, dynamically oriented therapy. The patients began having difficulty after they felt fetal movement. At this time, they became more dependent and demanding in relation to their physician. All of the women had been extremely and continuously frustrated in their expectations of their mothers. Most had problems with nausea and vomiting following emotional tension, had attacks of headaches after disagreements, and had severe diarrhea in stress situations. They had difficulty expressing hostility in a mature manner, resulting in tension, controlled hostility, and guilt. All nine eventually carried their pregnancy to term which points to the efficacy of dynamically oriented therapy in women with repeated abortions without organic pathology.

Daly reports that labor dysfunction may also be affected by emotional conflicts. He cites the work of Watson of 24 cases of prolonged labor without pelvic disproportion or abnormal presentations. Guilt over sexuality was the major conflict in common. They had “a wish for death of the fetus and then another wish for the mother’s own death during labor.”[35]

Postpartum

If the mother has a history of a postpartum psychiatric illness, then she has at least a 20% chance of having another illness postpartum. A psychotic episode will usually occur from 3 days to 4 weeks postpartum, while a postpartum depression usually occurs from 2 to 3 weeks to several months postpartum.

Women with schizophrenia or bipolar illness who have been compensated off of medication during pregnancy should restart any medication they were taking prior to pregnancy immediately postpartum. Psychosis can occur almost overnight.

If there is an affective component and an antidepressant is used, do not wait longer than 3 weeks for results; proceed on to ECT. Any absence of the mother emotionally will affect the bonding of the family and possibly develop life-long dynamic conflicts.[36]

Summary

The management of the mother with emotional disturbance carries a certain amount of risk because of the lack of enough scientific studies to verify the effect of the environment (medications and/or stress) on the fetus and neonate. The incidence of emotional disturbance during pregnancy is larger than earlier expected.

There is no proof of physical teratogenic effects from any psychotropic medication, except lithium, and this may be questionable. Safra and Oakly[9] at the Bureau of Epidemiology for the Centers for Disease Control in Atlanta point out there is a 2.0% background risk for having an infant with a major defect evident at birth. This makes it additionally dif-

ficult to control all the confounding variables that may be involved in any study. The behavioral aspect of teratogenicity must also be kept in mind.

There is strong scientific evidence that vomiting, recurrent miscarriage, and even difficult labor may have a psychologic component requiring treatment. Any such psychosomatic response should be fully evaluated with an obstetrician.

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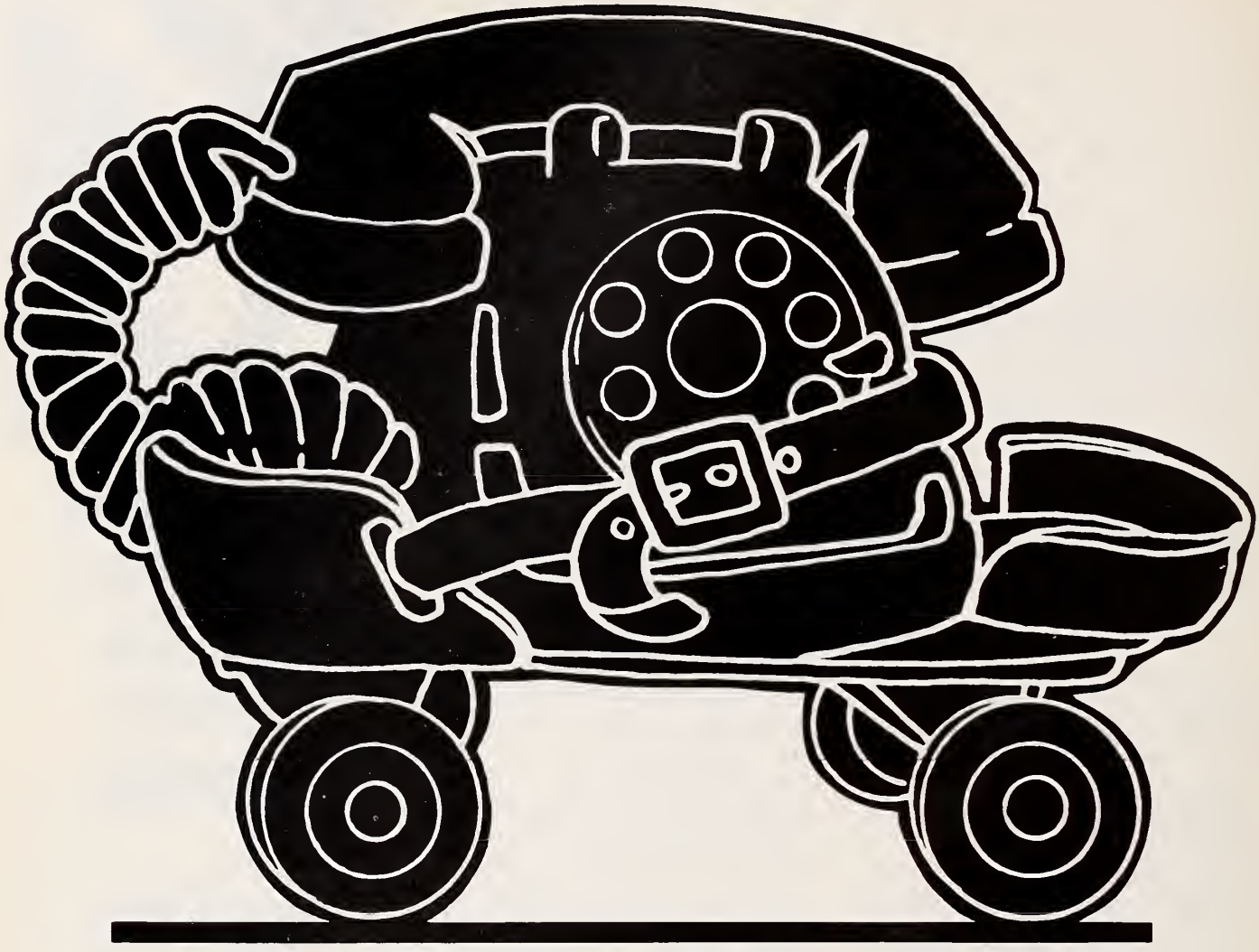
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PSYCHOANALYTIC PSYCHOTHERAPY AND ITS INDICATIONS

JULIAN R. GOMEZ, M.D.

THE AIM of Psychoanalytic Psychotherapy is to supply the unifying concepts of Psychoanalysis to the broad spectrum of interactions of the therapeutic process. The main focus is on individual psychotherapy, although some of the concepts elaborated would have applicability to other variations of treatment, such as Group Therapy, Family Therapy, or the Milieu Therapy of a hospital setting.

We will refer in this communication to therapy as being on a one-to-one basis, and as having essentially three modalities: 1) Supportive Psychotherapy, 2) Expressive Psychotherapy (also called Insight/Uncovering Psychotherapy), and 3) Psychoanalysis. Appropriate treatment of either variety rests on dynamic concepts of basic Psychopathology and on an appraisal of the capability of the patient to use the insights offered by Psychoanalytic Therapy.

Psychoanalysis

As a form of therapy, Psychoanalysis is based on the observations that individuals are often unaware of many of the factors that determine their emotions and behavior. These "unconscious" factors may create unhappiness, sometimes in the form of recognizable symptoms, at other times as personality peculiarities, difficulties in work or in a love relationship, or disturbances in self-esteem. Psychoanalytic treatment demonstrates how these factors affect current relationships and tasks, tracing them back to their origins and showing how they have changed and developed during the course of the individual's life.

"As a form of therapy, Psychoanalysis is based on the observations that individuals are often unaware of many of the factors that determine their emotions and behavior."

Analysis is an intimate partnership in the course of which the patient becomes aware of the underlying sources of his or her difficulties not simply intellectually, but emotionally, by reexperiencing them with the analyst.

The patient comes four or five times a week, lies on a couch, and attempts to say everything that comes to mind. Gradually, hints of the unconscious sources of current difficulties begin to appear — in slips of the tongue, in what is evaded, in the ways the patient relates to the analyst, and other parapraxes. The analyst elucidates these for the patient, who corrects, confirms, adds further thoughts and feelings. During the years that an analysis takes place, the patient works with these insights, going over them again and again with the analyst and experiencing them in a daily life and in dreams. Eventually, the patient's life — his or her behavior, relationships, sense of self — changes in deep and abiding ways. In the long run, patient and analyst join in efforts, not only to ease cramped life patterns and remove symptoms, but also to expand the freedom to work and to love. Analysis is a highly individualized treatment; therefore, any person who wishes to know if he or she would benefit from it should seek consultation with an experienced practitioner. Still, some generalizations can be made. The person who is best able to use Psychoanalysis to advantage is a fairly sturdy individual, although he

Dr. Gomez is in the private practice of psychiatry and psychoanalysis. Send reprint requests to him at 2060 Mt. Paran Rd., NW, Atlanta, GA 30327.

"The person who is best able to use Psychoanalysis to advantage is a fairly sturdy individual, although he or she may feel far from sturdy at the time of seeking treatment."

or she may feel far from sturdy at the time of seeking treatment. Indeed, this person may have already achieved some important satisfactions in work, with friends, or through special interests and hobbies, but nonetheless is unable to appreciate life fully.

He or she may be hampered by long-standing symptoms such as depression, anxiety, sexual incapacities, or physical problems without any demonstrable underlying physical cause. One person may have private rituals or compulsions or repetitive thoughts of which no one else is aware. Another might be troubled by a sense that things always seem to turn out in unpleasant ways, by patterns of failure or disappointment which cannot have been brought about by chance. For instance, a woman might become aware that she is always working at a job which is below her capacities — either procrastinating about seeking, or finding reasons somehow to refuse, more challenging positions. Or a man may observe that he falls in love only with other people's wives or with women who are in some respect unavailable. Some people seek analysis because they way they are, their character, limits their choices and pleasures. One might have difficulty being spontaneous and feeling close to others; another might be suffering and complaining inordinately despite the fact that his lot in life does not seem objectively bad. Essentially, they feel they are not as happy and/or effective in life as they sense they can be.

Whatever the problem, and each is different, that a person brings to the psychoanalyst, it can be properly understood only within the context of that person's strengths and life situation. Hence, the need for a thorough evaluation to determine who will benefit, and who will not, from psychoanalysis.

Psychoanalytic Psychotherapy

The actual technique of treatment can be conceptualized in terms of strategy and tactics. Strategy represents the overall plan and approach in general terms, while tactics are the immediate and specific therapeutic interactions. Strategy derives from basic theory, tactics are derived from strategy. In Supportive Therapy, the strategy is to permit the patient to maintain repression, while still being able to deal with those elements which are currently conscious or preconscious. Most patients for whom Supportive Therapy is best indicated are usually suffering from a severe illness, such as chronic schizophrenia, severe borderline conditions and extremely passive-dependent or inadequate personalities. In these situations, the Therapist does not attempt to bring unconscious conflicts into consciousness, since to do so in the absence of the Ego's capacity to integrate or resolve such conflicts could result in increased anxiety or further symptom formation.

"In Supportive Therapy, the strategy is to permit the patient to maintain repression, while still being able to deal with those elements which are currently conscious or preconscious."

On the other hand, the opportunity to ventilate, share, and discuss consciously disturbing problems and conflicts can be helpful, since once they have been expressed by the patient, the opportunity for reassurance, suggestion, or other intervention by the therapist is presented. The main tactics of clarification and confrontation in Supportive Therapy provide the patient with a more realistic way of behaving and with a more adaptive approach to life. Thus, the Therapist

will at times use cognitive processes to advise or give information to the patient, as well as using affective support to reassure, validate, and encourage the patient. Sometimes, the degree of infantilization and regression is such that it is also necessary to use environmental interventions with family, school, employers, employees, etc.

"Transference neurosis is a repetition in the here and now of pathogenic aspects of the patient's past."

Expressive Psychoanalytic Psychotherapy is indicated in hysterical personalities, severe narcissistic conditions, paranoid personalities, anorexia nervosa, "as if" personalities, borderline conditions, as well as any of the neuroses. In essence, then, this type of therapy is indicated for most patients in the middle range of psychopathology.

Clarification is used in this modality to deal with reality issues in an effort to bring into consciousness the preconscious. Confrontation is used to help the patient link his/her affects and experiences. These two tactics prepare the ground for the most important therapeutic work: *an interpretation in which we venture a hypothesis which explains the unconscious meaning of behavior.* Transference neurosis is a repetition in the here and now of pathogenic aspects of the patient's past; it refers to a past reality which becomes unconscious in the form of repressed fantasies that were, or became, unconscious in the process. The sicker patient presents the more severe pathology, which is indicative of more unconscious conflictive knots. In Psychoanalytic Psychotherapy, we treat the transference as a phenomenon which should be analyzed in the here and now, whereas Psychoanalysis deals with transference in a more systematic way. In other words, in Psychoanalysis the resolution of the transference neurosis (through a systematic interpretation of defenses and resistances) is essential to the cure of the Infantile Neurosis; on the other hand in Psychoanalytic Psychotherapy the transference is interpreted in the here and now in order to facilitate the improvement of the adaptive mechanisms of the patient.

The therapeutic boundaries of Psychoanalytic Psychotherapy are similar to those of psychoanalysis, such as regular times, place, duration of the session, and most especially the neutrality of the therapist.

Supportive psychotherapy is usually done once a week, though in some cases, the interval between visits can be longer. Expressive psychotherapy is done two or three times a week. In the latter case, the interpretation of primitive defenses — such as paranoid projections and projective identification — and the interpretation of transference phenomena in the here and now are the tools that make this treatment modality so useful in some cases involving serious pathology. In fact, for many authors, expressive psychotherapy seems to be the treatment of choice in borderline conditions.

"The therapeutic boundaries of Psychoanalytic Psychotherapy are similar to those of psychoanalysis, such as regular time, place, duration, and neutrality of the therapist."

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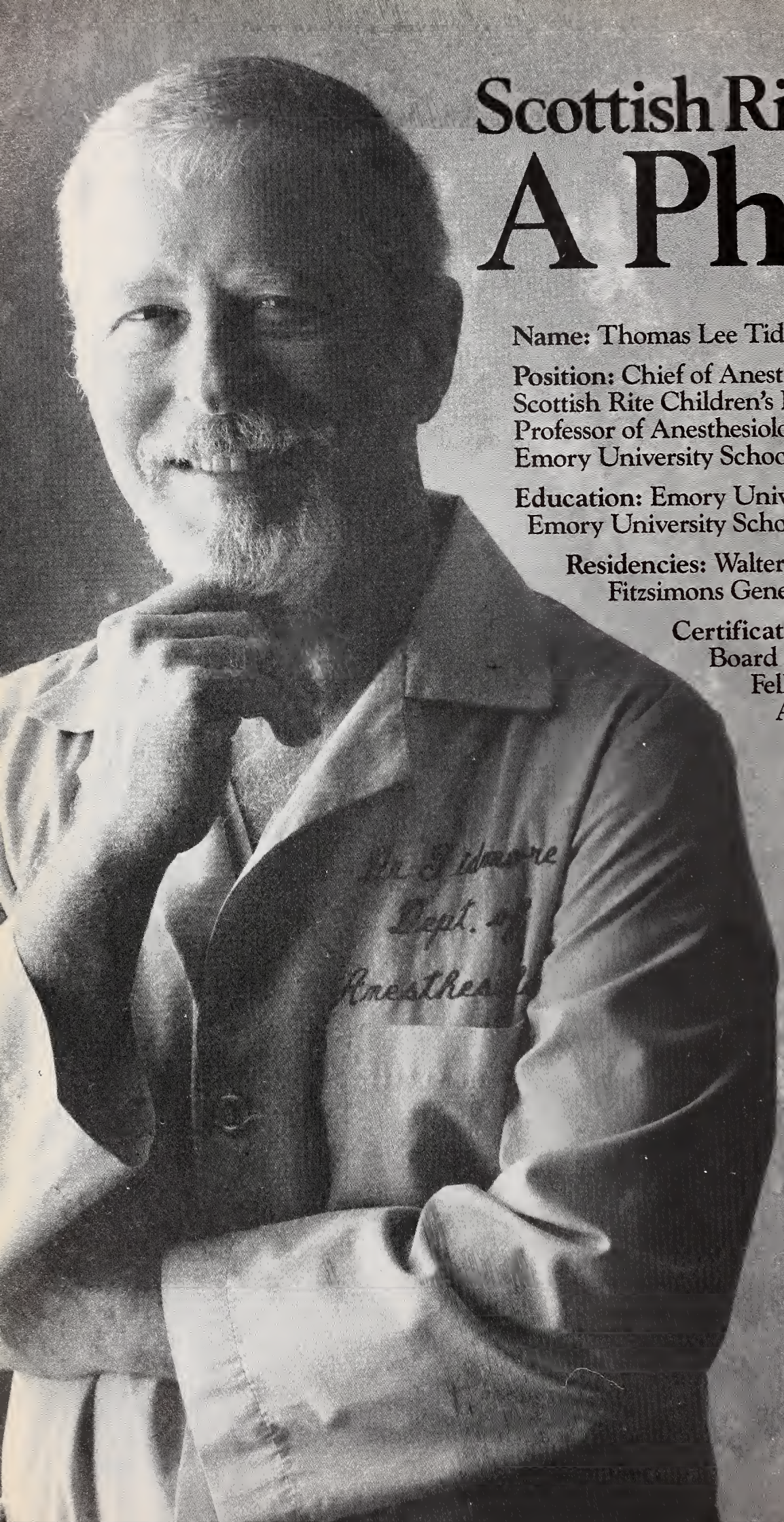
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Scottish Rite Profiles:
A Physicia

Name: Thomas Lee Tidmore, Jr., M.D.

Position: Chief of Anesthesiology
Scottish Rite Children's Hospital
Professor of Anesthesiology
Emory University School of Medicine

Education: Emory University, B.S.
Emory University School of Medicine, M.D.

Residencies: Walter Reed Army Hospital
Fitzsimons General Hospital

Certification: Diplomate, American Board of Anesthesiology
Fellow, American College of Anesthesiologists
Fellow, American Academy of Pediatrics

Professional Organizations Include:
American Academy of Pediatrics, Anesthesia Section; American Medical Association; Southern Society of Anesthesiologists, Past President; American Society of Anesthesiologists.

n's Physician

On Pediatric Anesthesiology: "Pediatric anesthesiology is an art as well as a science. Administering anesthesia to the young—and particularly the neonate—requires impeccable technique as well as comprehensive,



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On the Scottish Rite Anesthesiology Staff: "It is a privilege to work with this skillfully trained group of physicians on our anesthesiology staff. The credentials, the techniques, the performance are simply superior."

Ira P. Buchwald, M.D., was a fellow in pediatric anesthesiology at both the Emory University Hospital and Henrietta Egleston Hospital for Children before he joined the Scottish Rite Anesthesiology staff as a member of the Pediatric Anesthesia Specialists, P.C.

Kathryn Ward Collier, M.D., was an Assistant Professor of Anesthesiology at the Emory University School of Medicine prior to her joining Scottish Rite's anesthesiology staff.

Leila M. Martin, M.D., was a Fellow in Pediatric Anesthesiology at Emory University Hospital and Henrietta Egleston Hospital for Children. She was on the anesthesiology staff at Egleston prior to joining the Scottish Rite staff.



On Scottish Rite's use of advances in technology in pediatric anesthesiology: "Currently, Scottish Rite has state-of-the-art equipment comparable to that of the leading pediatric centers in the country. We have the capability of monitoring end tidal pCO_2, peripheral oxygen saturations, and blood gases in all cases.

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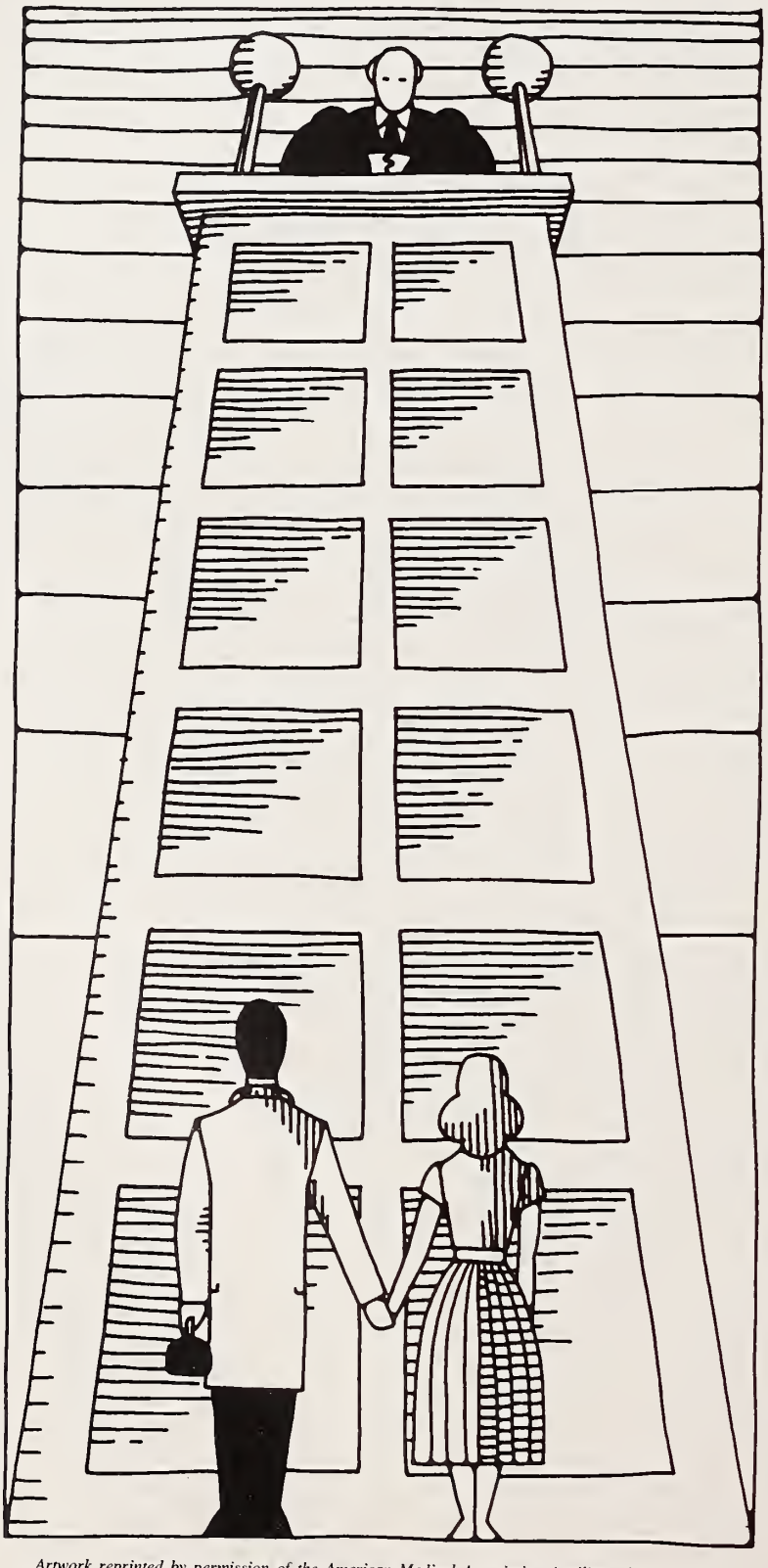
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YOU AND MALPRACTICE STRESS:



Artwork reprinted by permission of the American Medical Association Auxiliary, Inc., from its booklet, "What Every Physician's Spouse Should Know . . . Professional Liability."

I. What Happens To You When You're Sued?

Doctor, please observe these symptoms:

- In almost every case, patients show signs of emotional disequilibrium: depression, frustration, irritability, with sleep difficulties, appetite disturbances, and headache.
- 15% to 18% of patients report duodenal ulcer, hypertension, coronary heart disease, colitis — either new cases or exacerbation of existing ones.
- symptoms recur in periodic cycles for periods up to four, even five years.

What's the diagnosis?
Malpractice stress syndrome . . . and *YOU* are the patient.

* * *

For some time now, physicians have coped with the problems of being sued for malpractice. Skyrocketing insurance rates, risk management, defensive medicine — all these things have become part of physicians' professional lives.

But what effect does being sued have on a doctor's *personal* life?

Sara C. Charles, M.D., a Chicago psychiatrist, began studying this question. Through discussions with colleagues and a survey of several hundred physicians — not to mention the experience of being sued herself — Dr. Charles arrived at a number of conclusions. Chief among them is that a malpractice suit is considered a serious and devastating event in a physician's personal and professional lives. "I learned that being sued for malpractice has a considerable effect on doctors," Dr. Charles told an interviewer. Physicians under lawsuit report feelings of anger, shame and isolation. Of nearly 140 survey respondents, seventy per cent or more spoke of mood changes, inner tension, depression, and frustration. Others indicated irritability, insomnia, fatigue. A third of the doctors acknowledged feelings of defeat, of worthlessness and guilt.

Did physicians undergoing this stress seek support from colleagues? Generally not, Dr. Charles found. "Very few doctors talked to anyone about the experience — especially not to other doctors. . . . An enormous amount of unpleasant emotion was being absorbed internally by these individuals." The burden of support generally falls on families, but even sharing problems with a spouse is sometimes not enough.

That's why Dr. Charles and others came up with the idea of support groups. "One effective means to cope with tensions," she has written, "is to share reactions with others who have had similar experiences." The Illinois State Medical Society has organized a referral panel of physicians who have undergone the litigation process and are available to talk with colleagues facing lawsuit. Other state associations, especially medical auxiliary groups, have also formed professional liability support groups.

The Medical Association of Georgia has established a Committee to help organize such support groups. One of our first steps is to help inform the Association's membership on the importance of such groups, and how they will help physicians and spouses cope with "malpractice stress syndrome." To that end we've planned a series of articles for the *Journal.*

Next month: A Georgia Physician's Story: "How I Handled Being Sued."

(Reported by the MAG Committee on Professional Liability Support Groups: Earnest C. Atkins, M.D., Chairman; David M. Nichols, M.D.; Hoyt C. Dees, M.D.; Mrs. Barbara Tippins; Mrs. Marueen Vandiver; Mrs. Pearline Thomas; and MAG staff, Talitha Russell and Steve Davis.)

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for healed duodenal ulcer patients

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In two randomized, double-blind, and well-controlled clinical trials, ZANTAC 150 mg h.s. significantly superior to cimetidine 400 mg h.s. for maintenance therapy in healed duodenal ulcers.

Percent of patients with observed duodenal ulcer recurrence

		0-4 months	0-8 months	0-12 months	No. patients
USA[1]	ranitidine 150 mg h.s.	9%	14%*	16%†	60
	cimetidine 400 mg h.s.	23%	34%	43%	66
UK, Ireland, Australia[2]	ranitidine 150 mg h.s.	8%‡	14%‡	23%‡	243
	cimetidine 400 mg h.s.	21%	34%	37%	241

*p=0.02
†p=0.01
‡p≤0.004
%=life-table estimates
All patients were permitted prn antacids for relief of pain.

These two trials used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

The superiority of ranitidine over cimetidine in these trials indicates that the dosing regimen currently recommended for cimetidine is less likely to be as successful in maintenance therapy.

Convenient once-a-night dose with a

low incidence of side effects[3]

Headache, sometimes severe, seems to be related to ranitidine administration. Other side effects have been reported; for a complete listing, see the **ADVERSE REACTIONS** section in the Brief Summary.

No significant interference with the hepatic cytochrome

P-450 enzyme system at recommended doses

ZANTAC 150 mg has no significant drug interactions with theophylline, phenytoin, or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications that decrease gastric acidity are administered.

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for maintenance

See next page for references and
Brief Summary of Product Information.

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Zantac® 150

ranitidine HCl/Glaxo 150 mg tablets

One tablet at bedtime for maintenance therapy in healed duodenal ulcer patients

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3. Data available on request, Glaxo Inc.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary.

INDICATIONS AND USAGE: ZANTAC® is indicated in:

1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy. 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosage is 150 mg at bedtime.

Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome): The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosage is 150 mg twice a day.

GERD: The current recommended adult oral dosage is 150 mg twice a day.

See full prescribing information for dosage adjustment for patients with impaired renal function.

HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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June 1986

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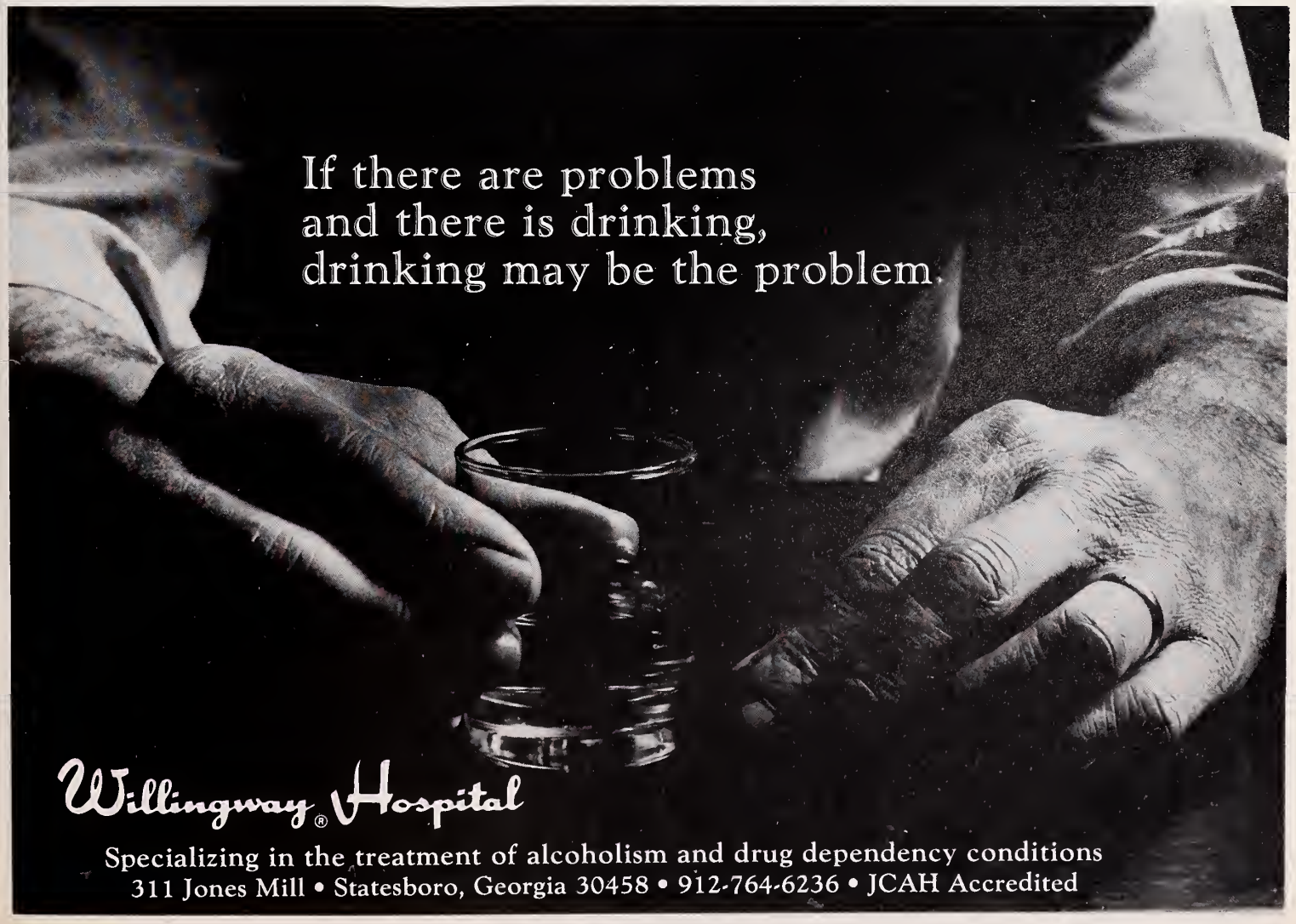
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Physicians Face Government Crackdown on Fraud and Abuse

Barry Sax

(Editor's Note: This is an important article giving concrete examples of how physicians and other health care providers can easily, and sometimes unknowingly, get themselves into trouble with the Federal government. A longer version of this article covering both joint ventures and the physician freeze abuse problem was originally printed in "The Health Lawyer," which is published by the Forum Committee on Health Law of the American Bar Association. This article has been shortened to discuss the government's active attack on physicians who are involved in joint ventures that result in alleged "kickbacks" to the physicians. While reading the article, the physician should keep in mind that there also are medical ethical standards that must be maintained as well as avoiding possible criminal sanctions.)

Mr. Sax is an attorney in private practice in the Washington, D.C. area. He has had extensive experience in both defending and prosecuting Medicaid and Medicare fraud and abuse cases.

RECENT DEVELOPMENTS in the Medicare and Medicaid programs are causing increasing problems for the nation's health care providers. The Department of Health and Human Service's Office of Inspector General is cracking down on what it sees as widespread fraud and abuse. Two areas in particular are now receiving a great deal of attention: violations of the "anti-kickback" laws by physicians involved in joint ventures with hospitals and other providers and suppliers; and violations of the physician fee freeze. This article will deal with the problems surrounding "joint venture" and related charges of "kickbacks."

As health care becomes more involved with sophisticated and creative business relationships, the industry moves closer to conflict with the Department of Health and Human Services (HHS) over application of the federal illegal remuneration statutes. The applicable laws, 42 U.S.C. § 1395nn(b) for Medicare and 42 U.S.C. § 1396n(b) for Medicaid, prohibit the knowing and willful soliciting, receiving, offering or paying of any remuneration in return for the referring of patients or customers or the generating of business for the party furnishing the remuneration. The statutes make clear that remuneration includes kickbacks, bribes and even rebates, given or accepted directly or indirectly, overtly or covertly, in cash or in kind. The general language emphasizes Congress' intent to bring within the statutes' scope a wide variety of practices which the government believed was encouraging unnecessary utilization, and costing the Medicare and Medicaid programs billions of dollars in fraudulent and abusive claims and cost reports.

"The point is clear. Physicians can put themselves at risk under Medicare and Medicaid when they become involved in joint ventures designed to stimulate business. The best advice is to seek legal counsel on these issues."

There is no shortage of evidence that HHS and the courts take the law very seriously. In *United States v. Hancock*, 604 F.2d 999 (7th Cir. 1979), *cert. denied* 444 U.S. 991 (1979), two chiropractors claimed the payments were legitimate "handling

fees'' for the services of obtaining, packaging and sending blood and tissue samples to a laboratory and then interpreting the results. The court construed the payments as kickbacks and upheld their conviction.

In *United States v. Ruttenberg,* 625 F.2d 173 (7th Cir. 1980), a druggist paid monthly fees to nursing home owners for the opportunity of providing drugs and other items to Medicaid recipients in the homes. The druggist claimed the payments were fees for consulting services. The court upheld the conviction and added that the potential for increased costs to the program was just as much an evil to be avoided as an actual increase.

In *United States v. Universal Trade and Industries,* 695 F.2d 1151 (9th Cir. 1983), the operator of a laboratory was convicted of offering a kickback to a doctor in return for the doctor allowing the laboratory to do all his tests. The conviction was upheld. The Court noted that a kickback offered in return for ordering services is as much a violation as one offered for the referral of patients. The physician was cooperating with the government or he, too, would have been liable under the statute.

The dangers are emphasized by the recent case of *U.S. v. Greber,* 760 F.2d 68 (3rd Cir. 1985). Greber is an osteopathic physician who is board certified in cardiology. In addition to hospital staff and teaching positions, he was founder and president of Cardio-Med, Inc., the company which provided physicians with diagnostic services, including,among others, a Holter-monitor, a device worn by a patient for all or part of a day to record cardiac activity on a tape which is later analyzed.

Greber was charged, in addition to mail fraud and making false statements, with six counts of tendering remuneration or kickbacks in violation of 42 U.S.C. § 1395nn(b)(2)(B) (1982). The government's proof was that Greber paid to other physicians ''interpretation fees'' for the doctors' initial consultation services, as well as for explaining the test results to the patients. There was evidence that the physicians received ''interpretation fees'' even though Greber had actually evaluated the monitoring service.

Greber contended that ''absent a showing that the only purpose behind the fee was to improperly induce future services, compensating a physician for services actually rendered could not be a violation of the statute.'' The government argued that ''Congress intended to combat financial incentives to physicians for ordering particular services patients did not require.'' The court found that ''even if the physician performs some services for the money received, the potential for unnecessary drain on the Medicare system remains. The statute is aimed at the inducement factor.'' The *Greber* opinion concludes that if the payment were intended to induce the physician to use Cardio-Med's services, the statute was violated, even if the payments were also intended to compensate for professional services. The remuneration may be in return for the immediate referring of a patient or generating of fees or for the creation of an opportunity to generate fees. In addition, there may be illegal remuneration when services have, in fact, been performed, just as when no real service has occurred. In essence, any remuneration provided as an inducement can constitute a violation, regardless of the additional factors.

An analysis of the cases shows that the courts are prone to accept determinations by HHS that specific financial relationships violate the illegal remuneration laws. This does not mean that all joint venture arrangements violate the law simply because all parties expect, or at least hope, to gain some financial benefit. It means that joint ventures and other business relationships must be constructed to avoid known danger areas as much as possible or, at least, to minimize the risk.

There is enough evidence now of how HHS views these problems to provide valuable guidance. Three recent Medicare Intermediary Letters, Part A/B I.L. 83-13/83-7, Part A/B I.L. 83-19/83-22 and Part B I.L. 85-2 (which supersedes 84-9), clearly demonstrates HHS's continuing interest. The first deals with ESRD suppliers offering rebates to dialysis facilities in return for the facility encouraging their patients to continue

or to begin to deal directly with the individual suppliers. The second discusses manufacturers offering physicians and hospitals rebates, kickbacks and/or "free goods" in return for their purchase of pacemakers and intraocular lenses. Intermediary Letter 85-2 specifically discusses the legality of fees paid by a DME supplier to respiratory therapists employed in hospitals and other institutional settings who will direct their patients being discharged and needing home oxygen equipment and supplies to the DME supplier. The letter adds that "payments" to other allied health personnel employed in the institutional setting for patient referrals would also constitute a violation of the illegal remuneration statute.

"Simply calling a payment a service or consulting fee or some other apparently acceptable designation offers little, if any, protection."

HHS has issued non-binding opinion letters over the years which reflect the Department's viewpoint. One such letter indicates that a hospital may not provide an incentive to a physician if the incentive is related to, or dependent upon, the number of patients he treats, the number of patients he refers to the contracting hospital, or the number of services provided to the patients or the value thereof. Direct payments to the physician for each patient he admits to the hospital would, in view of HHS, also be prohibited.

Additional letters discuss other hospital-physician incentives, medical staff discounts, the use of shared services organizations (also known as group purchasing organizations), arrangements with independent clinical laboratories, ambulance services, long-term care facilities (particularly "exclusive use arrangements" to reserve beds) and assorted rental and purchase agreements. The list grows as hospitals develop new ways to survive and prosper under the requirements imposed by the Prospective Payment System and the workings of the marketplace.

This is not an easy time for health care providers and practitioners. The recent Intermediary Letters suggest a broad interpretation by HHS of what constitutes a potential violation of the illegal remuneration statutes. Once HHS decides to open an investigation, the practitioner is put into the position of having to explain business relationships which have existed for months or years and to provide documentation adequate to satisfy HHS.

A number of basic lessons can be derived from an analysis of the statutes, cases and HHS opinion letters:

1. HHS and the courts will look past the form of the relationship to the substance. Simply calling a payment a service or consulting fee or some other apparently acceptable designation offers little, if any, protection.
2. A violation occurs when any remuneration, whether it is called a bribe, kickback or rebate, is offered or solicited, given or received *in return for* the referral of patients or the generation of business. This may even be true when the payment is ostensibly in exchange for services.
3. HHS has instructed the carriers to detect and report to the appropriate Regional Office of Inspector General all cases involving payments to individuals who are in a position to refer patients to, or generate business for, the person making the payment.
4. Where the intent of the parties has to be implied from the known facts, the following points are commonly considered by HHS:
 - A. Does the practice have a tendency to encourage unnecessary utilization;
 - B. Does the practice cause either an increase, or have the potential of increasing, costs to the government;
 - C. Is the amount of the remuneration related to the number of referrals or the dollar value of the business generated, or is it a previously agreed-to figure which does not change according to fluctuations in referrals or business; or
 - D. Are there legitimate business reasons for the payment and is the payment a reasonable value for the service provided?

The point is clear. Physicians can put themselves at risk under Medicare and Medicaid when they become involved in joint ventures designed to stimulate business. The best advice is to seek legal counsel on these issues before formal agreements are signed. The balance between what are considered to be business or marketing requirements and potential problems with HHS is often delicate, at best. But, as with many things in life, a little extra effort to construct an acceptable relationship now can save a great deal of time, money, aggravation and legal problems further down the road.

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9 Medical Arts Center, Savannah 31405

Liebowitz, Steven M., Bibb — Act (N-2) — IM
P.O. Box 294, Gray 31032

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Mize, Roger D., Elbert — Act — IM
33 Chestnut St., Eberton 30635

Parikh, Yashaswini H., Gwinnett-Forsyth — Act — PD
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Mitchell County Hosp., Camilla 31730

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Schwartz, Philip G., Georgia Medical — Act — IM/CD
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Smith, Laurin G., III, Spalding — Act — FP
P.O. Box 508, Barnesville 30204

Teter, Allen L., Ogeechee River — Act (N-2) — GS
412 Northside Drive, East, Statesboro 30458

PERSONALS

Second District

Ed Hall, M.D., has joined the medical staff at John D. Archbold Memorial Hospital as a general, vascular, and thoracic surgeon. He will also serve as medical director for the trauma center at the hospital and as medical director and trauma consultant for the Southwest Region of Emergency Medical Services.

Fourth District

B. Donald Minor, M.D., of Decatur, received special recognition during the convocation ceremonies at the annual meeting of the American College of Radiology. Selected for his outstanding contributions to the field of radiology, Dr. Minor was named as one of the 84 fellows by the College's Board of Chancellors.

John P. Syribeys, M.D., a Decatur surgeon and a Colonel in the Georgia Air National Guard, has been awarded the Air Force Commendation Medal for outstanding professional achievement while serving as the State Air Surgeon at Headquarters, Georgia Air National Guard.

Fifth District

Nanette K. Wenger, M.D., Professor of Medicine (Cardiology), Emory University School of Medicine, and President of the Scientific Council on the Rehabilitation of Cardiac Patients of the International Society and Federation of Cardiology, participated as the International Guest Speaker at the VI Asean Congress of Cardiology in Jakarta in June of 1986. In July of 1986, she was Visiting Professor at the Instituto Nacional de Cardiologia in Mexico City. In August, Dr. Wenger was an Invited International Lecturer at the 142nd Congress of the Brazilian Society of Cardiology.

Orlando Lopez, M.D., chief of staff-elect at Henry General Hospital, has been appointed a clinical assistant professor of surgery for the Department of Urology at the Emory University School of Medicine.

Seventh District

David Wells, M.D., was presented a Governor's Proclamation for his accomplishments and contributions to the area family planning program at the Governor's Special Council on Family Planning in Chatsworth. Dr. Wells was instrumental in establishing the family planning clinic at the health department in 1967.

Robert B. Berkowitz, M.D., has set up practice in Acworth. Dr. Berkowitz specializes in allergic, immunologic, and respiratory diseases in adults and children.

Tenth District

George Mayfield, M.D., an Augusta internist and cardiologist, closed his 21-year-old private practice to become one of three full-time physicians at the Augusta Correctional and Medical Institution.

Michael Maloney, M.D., has set up a new allergy/immunology practice in Gainesville.

Gerald B. Holzman, M.D., of Augusta, has been appointed chairman of the National Board of Medical Examiner's Part II Obstetrics-Gynecology Test Committee. Dr. Holzman is professor and vice chairman of the department of obstetrics and gynecology at the Medical College of Georgia.

DEATHS

Donald Mead Kurtz, M.D., of Columbus, died recently at the age of 51.

Dr. Kurtz was director of pathology at Hughston Sports Medicine Hospital and had worked with Columbus Pathology, Inc., since 1973. He earned his medical degree from the State University of New York in 1960 and served in the U.S. Navy for 3 years. He was a member of the American Medical Association, Medical Association of Georgia, Muscogee County Medical Society, American Society of Clinical Pathologists, and was a fellow of the College of American Pathologists.

Survivors include his mother, wife, and two children.

QUOTES

No great work has ever been produced except after a long interval of still and musing meditation.
WALTER BAGEHOT

The quality of life is more important than life itself.
ALEXIS CARREL

Hold yourself responsible for a higher standard than anybody else expects of you.
HENRY WARD BEECHER

Common sense is genius dressed in its working clothes.
RALPH WALDO EMERSON

I like to listen. I have learned a great deal from listening carefully. Most people never listen.
ERNEST HEMINGWAY

It would do the world good if every man in it would compel himself occasionally to be absolutely alone. Most of the world's progress has come out of such loneliness.
BRUCE BARTON

I am never less alone than when alone.
SCIPIO AFRICANUS

The fellow who thinks he knows it all is especially annoying to those of us who do.
HAROLD COFFIN

Some are so very studious of learning what was done by the ancients that they know not how to live with the moderns.
WILLIAM PENN

The man who acts never has any conscience; no one has any conscience but the man who thinks.
GOETHE

If we find nothing of interest where we are, we are likely to find little of lasting interest where we wish to go.
EDWIN WAY TEALE

Failure is instructive. The person who really thinks learns quite as much from his failures as from his successes.
JOHN DEWEY

Opposition inflames the enthusiast, never converts him.
JOHANN SCHILLER

One is led astray alike by sympathy and coldness, by praise and by blame.
GOETHE

It is always well to moor your ship with two anchors.
PUBLILIUS SYRUS

Economic stimulation that encourages the increased expenditures of the rich has an aspect of soundness that is lacking in expenditures on behalf of the undeserving poor.
JOHN KENNETH GALBRAITH

It's getting so people don't want to work with their hands . . . or their head.
ARNOLD GLASOW

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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

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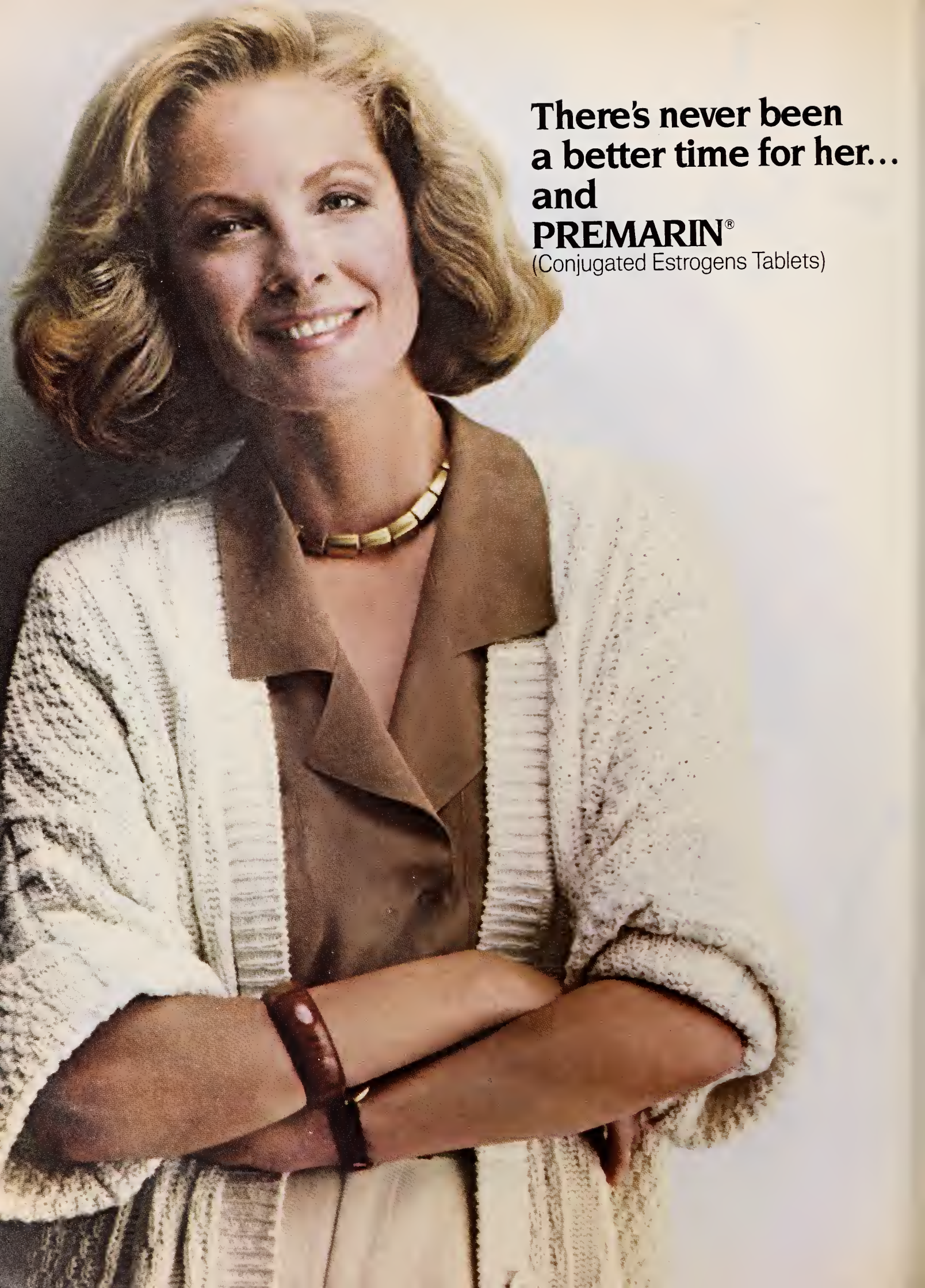
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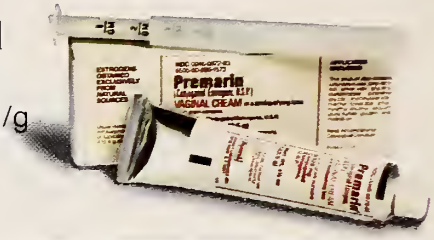
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PREMARIN®
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Vaginal Cream

0.625mg/g



BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

1. ESTROGENS HAVE BEEN REPORTED TD INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.
2. ESTROGENS SHOULD NDT BE USED DURING PREGNANCY.
The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPDSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CDNTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the nsk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g. Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea: premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

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1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

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Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

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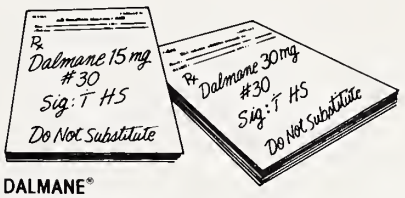
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References: 1. Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Sac 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychapharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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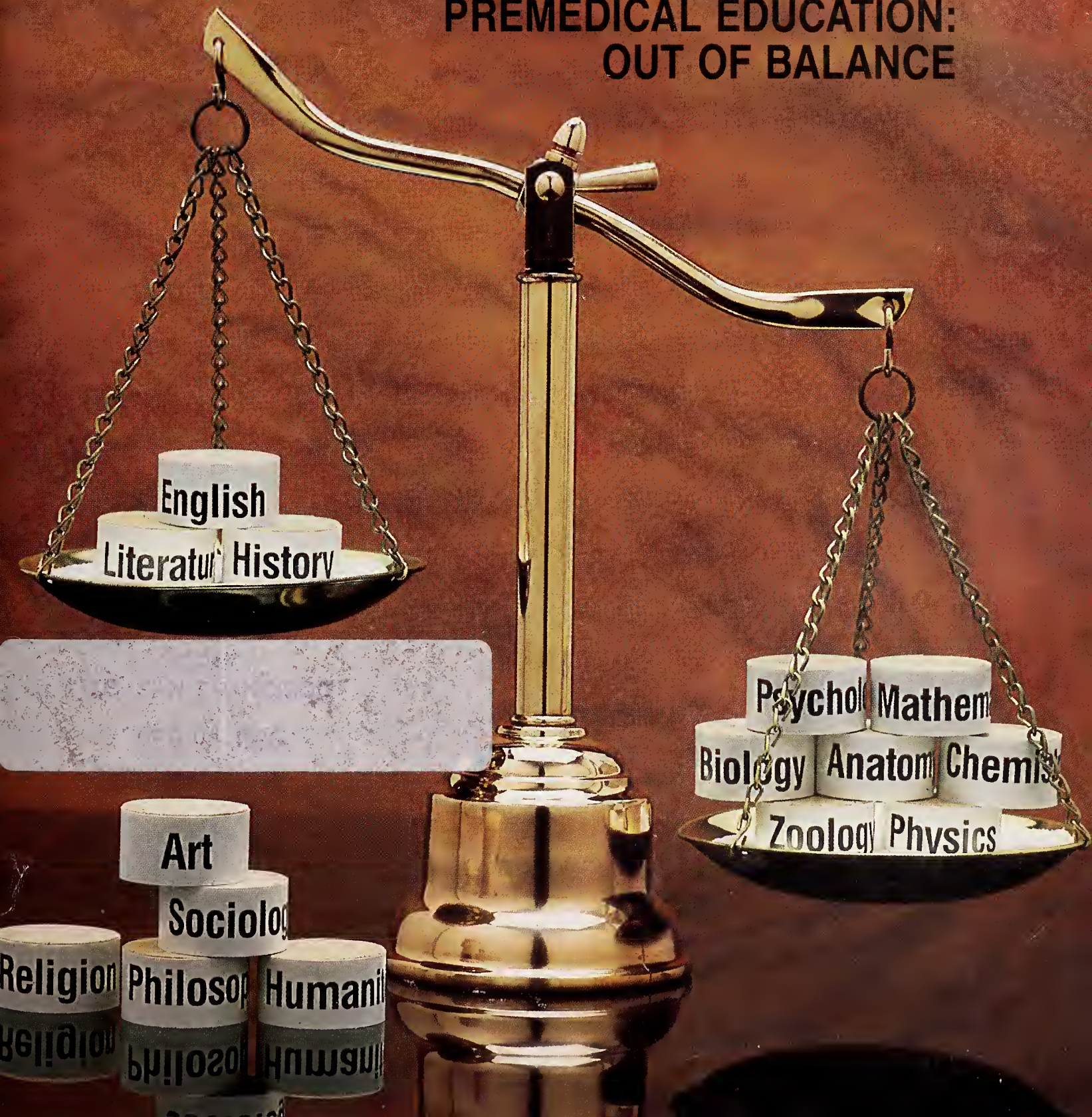
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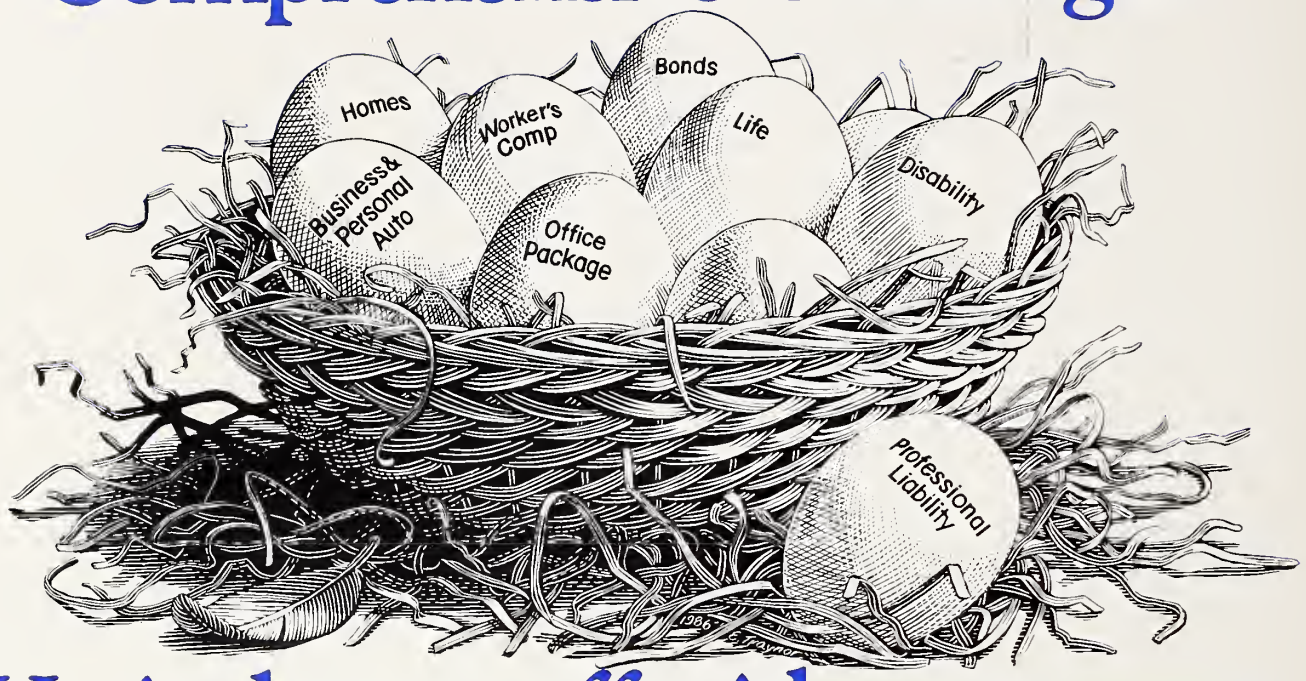
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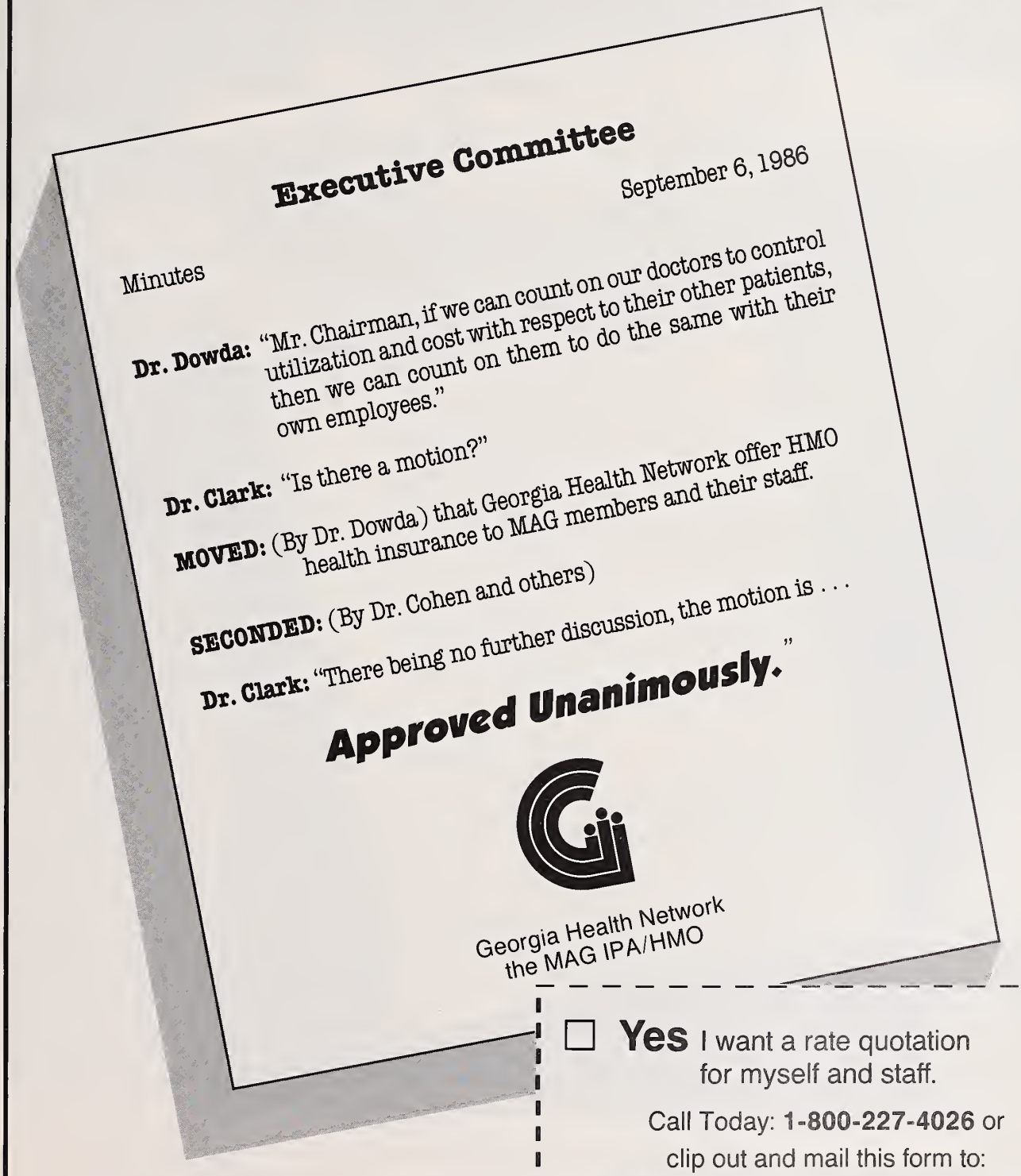
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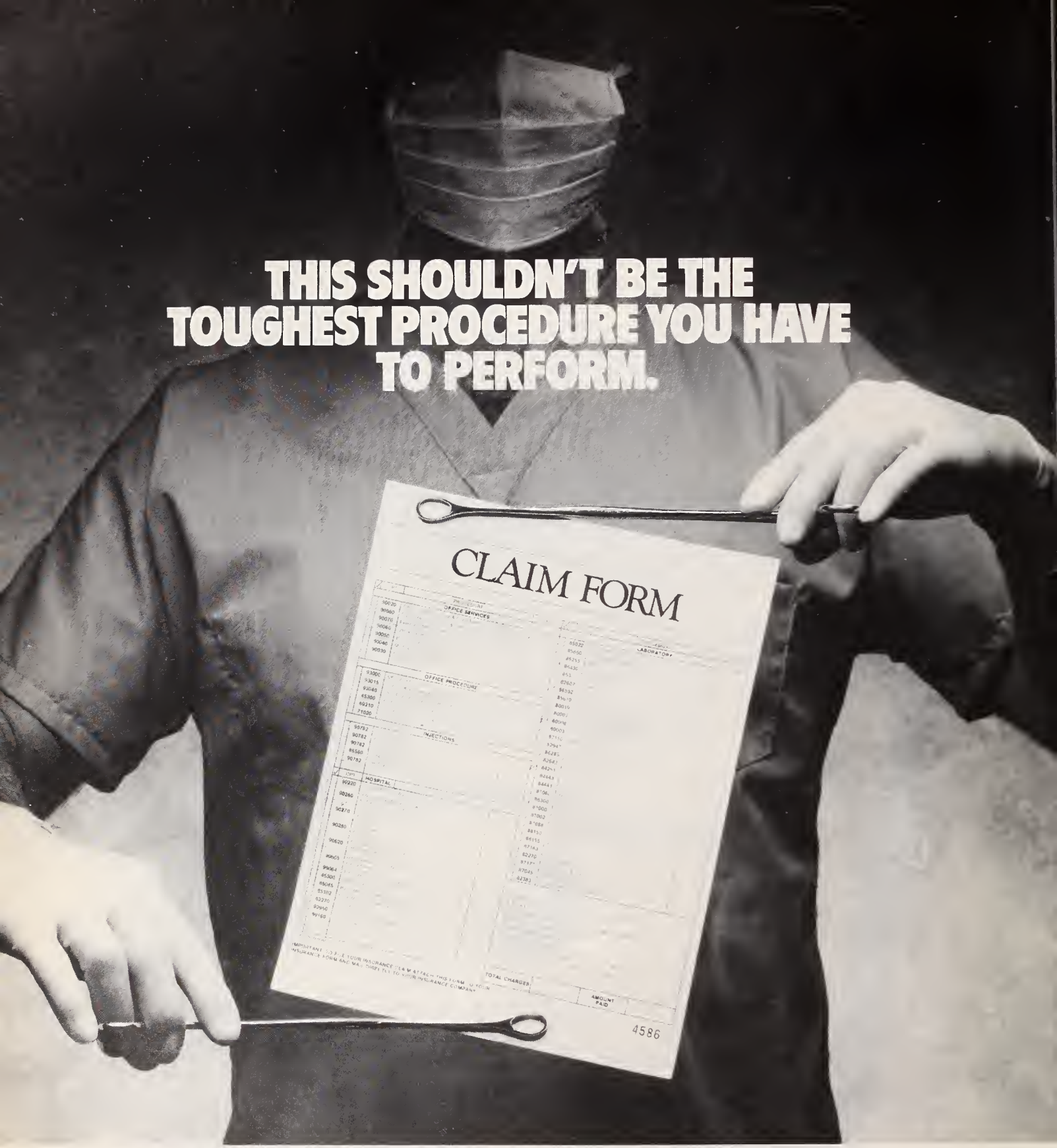
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COVER

Two Athens physicians speak out against the curricula of premedical education in the article on pp. 656-658. A timely subject.

Cover photo by Chuck Rogers, of Atlanta.

A New Option For Patients With Persistent Pain.

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Stand Together . . . Or Hang Separately



John D. Watson, Jr., M.D.

Friends and Associates,

We are entering, in my judgment, into of the critical phases of medical practice. The issue is survival or demise of the "Private Practice" of Medicine as we have known it. From all that I can see, the hospitals are making their moves to contain and control medical practice and will continue to press the issue to their advantage. The thrust of medical care is out-patient care and short hospital stay. This equates to severely diminished hospital censuses and threatens the survival of the hospital. We are significantly overbedded, and only through capture of their medical staffs and almost restrictive assignment of patients will they survive. And they will not all survive. This is the point of this communication to you.

Many of the hospitals have developed "essentially PPOs" which are integrated into their hospitals. They are marketing industry and other groups to utilize their hospital, with discounting of rates to make them more attractive. The next move is to make the rates of the physicians attached to them more attractive as well. They usually start with the hospital-based physicians, insisting upon their discounting professional fees or payment to the hospital for the privilege of utilizing the hospital facilities, equipment, etc., for which they are already presumably appropriately compensated. However, if they can force you, the physician, to make payment to them for use of the facilities, then they can be more competitive in industry with other hospitals. If they capture the major industry, will they assess a fee on the surgeon for use of the operating room. Is this any different?

I know there is great competition among the hospitals for survival, but I do not appreciate or wish to have the competitive edge obtained on the backs of the physicians, all or any one of us. Do we have the discipline to see what they are trying to do and act accordingly? Can we not see that what happens to one of us can happen to all of us eventually?

When you are presented with a proposal for some type of integration which is placed upon you, "knowing your great loyalty to the institution," please stop and read the proposal carefully. See if it abrogates your rights of due process. Look at the length of the agreement and your ability to get out if you don't approve of the arrangement. If you have concerns about it, have your own attorney or the in-house counsel of MAG advise you prior to signing. Be ever vigilant of compromise of any one of your staff. If you allow compromise of any segment, you almost guarantee the eventual involvement of the rest of the staff.

You must retain the privilege and freedom for yourself and your patients of utilizing the hospital of their choice and yet not encumber yourself to that facility to their significant inurement. The Medical Association of Georgia formed a statewide IPA just for this purpose, to have the ability to represent and negotiate appropriate relationships with hospitals, industry, or anyone else to represent fairly all physicians from our point of view — the physician's point of view. Do we have the discipline to stand together or shall we be split asunder? We have provided the mechanism, the only mechanism that can address this ominous problem and be successful, but it will only be successful if we act as one unit and negotiate as a whole body.

Think seriously on this issue. It bears heavily on the future of our profession as a free and not captive profession. Our greatest protection is to join our IPA and allow our representatives to negotiate for us, whether with an individual hospital, industry, or whomever. One on one, they will pick us apart. Together, we have the ability to bring the unified forces to bear for an equitable solution. He or she, who "sells us out" for a brief advantage — and I will assure you that it will be brief, plants the seeds of destruction for all of us. Do not succumb to what may appear to be a personal advantage. Together, and only together, shall we succeed.

John D. Watson Jr. M.D.

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19 — *Atlanta:* **Cancer Prevention & Control for Black Americans.** Category 1 credit. Contact Janet Bonfiglio, Ga. Div., American Cancer Society, 1422 W. Peachtree St., Atlanta 30309. PH:404/892-0026.

20-21 — *Augusta:* **Flexible Fiberoptic Sigmoidoscopy.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

21-22 — *Atlanta:* **Georgia Society of Anesthesiologists Annual Meeting.** Category 1 credit. Contact John B. Neeld, Jr., MD, 1000 Johnson Ferry Rd., NE, Atlanta 30342; PH:404/255-7512 or Michael R. Murphy, MD, 1365 Clifton Rd., NE, Atlanta 30322; PH:321-0111.

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25-March 1 — *Cozumel, Mexico:* **Scottish Rite Children's Hospital 9th Annual Pediatric Post-Graduate Course.** Category 1 credit. Contact Darlene Baugus, R.N., Ed. Dept., 1001 Johnson Ferry Rd., Atlanta 30363. PH:404/252-9377.

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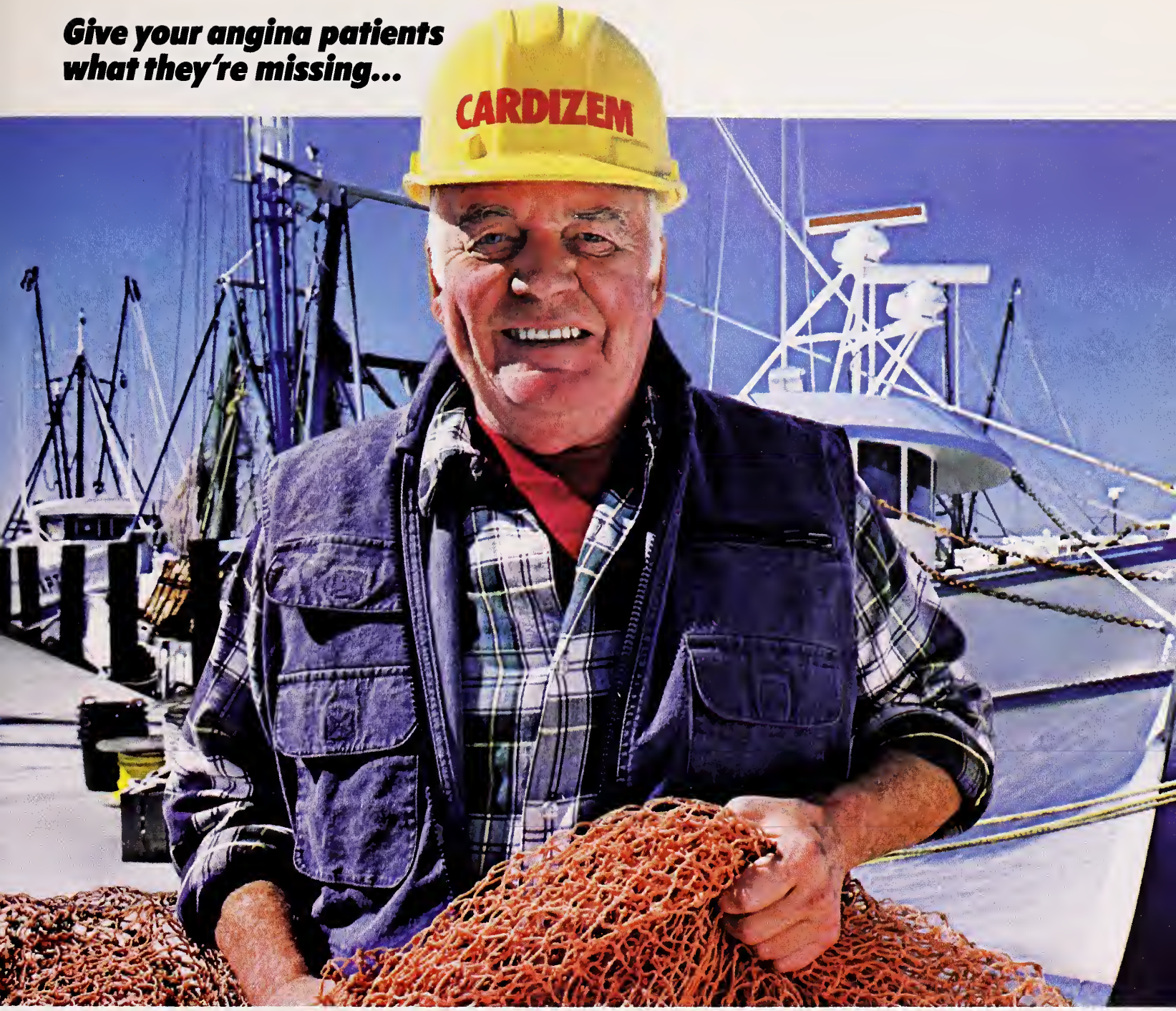
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CONTRAINDICATIONS
CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. ***Cardiac Conduction.*** *CARDIZEM prolongs AV nodal refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.*
2. ***Congestive Heart Failure.*** *Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt).*
 Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. ***Hypotension.*** *Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.*
4. ***Acute Hepatic Injury.*** *In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)*

PRECAUTIONS
General. *CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.*

Drug Interaction. *Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)*

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.*

Pregnancy. *Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.*

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. *Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.*

Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS
Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastrointestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 7/86*

See complete Professional Use Information before prescribing.

References: ***1.*** *Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347.* ***2.*** *Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159.* ***3.*** *Johnstan DL, Lesoway R, Human DP, et al: Clinical and hemodynamic evaluation of prapranalol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol 1985;55:680-687.* ***4.*** *Cohn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39.* ***5.*** *Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.*

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Pediatric internship, residency and fellowship
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at Children's Hospital, Buffalo, NY

Co-Medical Director:
Stephen W. Anderson, M.D.
Pediatric internship, residency and fellowship
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Social Change and The Drinking Age

"Statistics have finally been accumulated during the past few years to convince some of the American public to change their habits in order to live longer, more productive lives."

SOCIAL CHANGE in our Democratic society is slow in coming, partially due to our Bill of Rights, as well as to our need to prove statistically what our collective observations have already shown us to be true. Lifestyles that lead to lung cancer, atherosclerosis, heart attacks, and skin cancer have been suspect by the medical profession for over 20 years. Statistics have finally been accumulated during the past few years to convince some of the American public to change their habits in order to live longer, more productive lives.

The simple observation that alcohol ingestion impairs one's judgment, reflexes, and ability to handle a motor vehicle has been made by many individuals since the introduction of the "Model T" in 1908. It would seem an easy task then, based on this observation, to outlaw alcohol consumption by the driver of any vehicle. But years of gathering statistics and thousands of lives wasted on our highways in alcohol-related accidents did not spur most states into legislative action until "Big Brother" became interested in this problem.

On July 17, 1984, President Reagan signed into law a national uniform drinking age of 21. Coupled with the inactment was the withholding of federal highway funds for failure to comply by October 1, 1986. Even though the 21-year-age issue received the widest publicity, the bill included significant proposals on education, prevention, rehabilitation programs, and enforcement. Georgia and 43 other states complied with this law in time for the federal highway funds. Hurrah for us! But would we have done it based only on the desire to decrease our alcohol-related highway deaths?

In 1984, there were an estimated 23,000 people killed on our national highways in DUI accidents. It is also estimated that almost 60% of drivers ages 15 to 24 who are fatally injured had been drinking. While the young people (ages 15 to 19) account for only 10% of the driver population, they represent 17% of all alcohol-impaired driver accidents in the United States. Thirteen states were studied between 1975 and 1982 to determine the effect of raising the legal drinking age on drivers involved in fatal crashes. The pooled data from these states showed a 13% reduction in fatalities, with a range of 6 to 19%. There has also been a downward trend in teenage alcohol-related fatalities reported on Georgia state roads after the drinking age was raised from 18 to 19 years in September 1980. There has been a 22% decrease in DUI-cited highway fatalities in this teenage group during the 5-year period ending September 1985.

A more specific report on teenage drinking and driving in Fulton County is given by Drs. Walker and Hanzlick on p. 660 in this issue of the *Journal*. The authors raise the question of whether or not "it would seem prudent and more effective to consider alternatives to reduce drinking and driving in older age groups, who account for far more alcohol-related traffic fatalities than

teenagers.'' This certainly is a good point, and one wonders if the ramifications of the new national uniform drinking age law will not eventually help the older driver as well.

Funds for education will be available under the new law, and national attention has already been called to DUI fatalities through the media. Public awareness of the seriousness of the drunk driving problem has been a major first step along the road of social change. Organizations such as Mothers Against Drunk Driving (MADD), the National PTA, the National Safety Council, and the National Council of Alcoholism have been very visible in their national campaigns to educate and warn us of the dangers involved when teenagers drink and drive. As with any social change, education of the young child at a grade school level is imperative if we expect success for the future. Many children now admonish their parents for smoking and remind them to buckle up their seat belts as a result of early childhood education. The same type of early education concerning drinking and driving should also prove effective in the future.

Under the new law, funds will be available to help with treatment and rehabilitation programs for convicted DUI offenders. Incarcerating these people may keep them off the highways for awhile but does not get to the root of the problem. They need help in rehabilitation whether they are alcohol abusers or true alcoholics. This provision of the new law may be a blessing to many people who need help. Federal funds will also be available for enforcement and computerization of traffic records.

Other implications of the law may lead to a change in the social lifestyle of young people — especially on campuses where schools have to enforce the law. We hope that marijuana and other drugs will not be substituted for alcohol in this age group in an effort to seek a thrill. Improvement in school performance and a lower absentee rate may also be a positive result. If a teenager has grown up in a society where it is legally and socially unacceptable to drink and drive, he may mature into a person who finds it more natural to adopt a ''designated driver'' policy. Such a policy has proven successful in Sweden.

In time, the ramifications of the new national uniform drinking law may be more widespread and produce a healthier society than many other social changes we have witnessed through legislation. We certainly hope so, but we will have to wait for the statistics to prove what we already suspect to be true.

W. Scott James, M.D.,
Pediatrician;
Chairman, Legislative Committee,
Georgia Chapter,
American Academy of Pediatrics; and
Member, MAG Legislative Committee

''In time, the ramifications of the new national uniform drinking law may be more widespread and produce a healthier society than many other social changes we have witnessed through legislation.''



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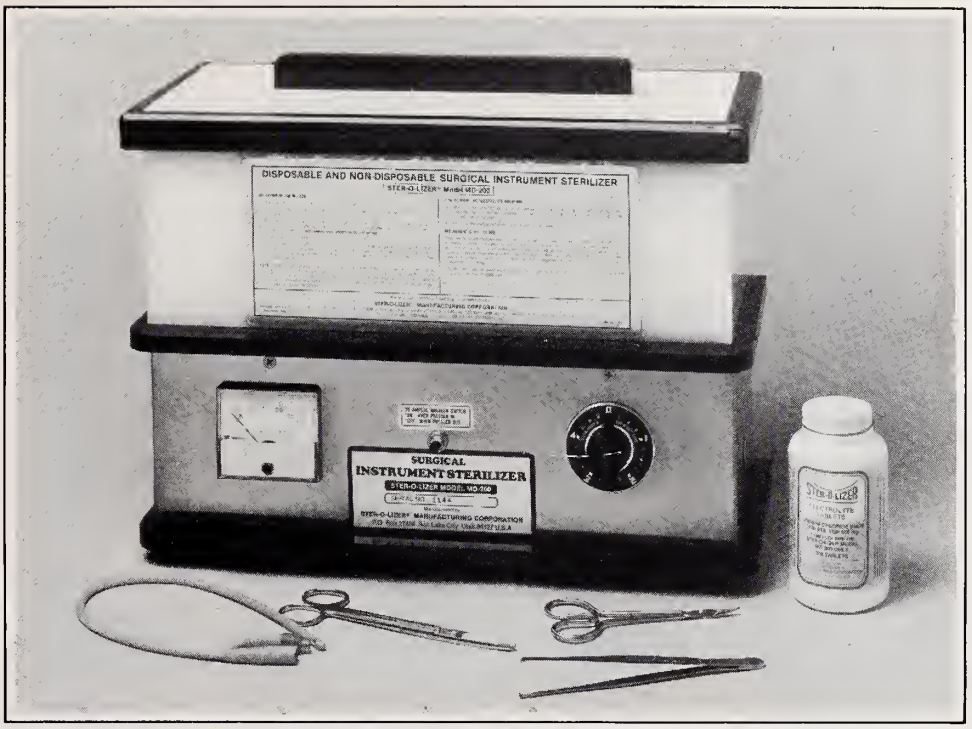
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Premedical Education: Out of Balance

HARVEY G. OUZTS, M.D., HILLARY R. NEWLAND, M.D.

"By the neglect of the study of the humanities which has been far too general, the profession loses a very precious quality."
WILLIAM OSLER *(1849-1919)*

"Men in leading positions are beginning to realize that the backbone of intellectual training lies in liberal education and in the adjustment of the content of the humanities to modern conditions."
HANS ZINSSER *(1878-1940)*

THROUGHOUT this century, educators have encouraged a liberal education for physicians. Yet most of the present medical students and physicians have had a narrow baccalaureate education, majoring in biology, chemistry, or a related science. Students take majors in science and courses in which their chances of an "A" are good. Their primary goal in college has been and continues to be the preparation for admission into medical school. Because the selection process in medical school emphasizes grade point average and scores on the science-oriented Medical College Admissions Test (MCAT), college students and premedical advisors are forced into the present situation. These admission goals have taken precedence over education, which should serve a greater purpose than entry into medical school. We believe there is too much emphasis on college science, that this emphasis is not justified and that little action is being done to alter the problem.

"I'm not going to have time for many electives because I've decided to get double majors in biology and chemistry."
Porter Osborne, Jr., premedical student in *Whisper of the River* by Ferrol Sams

How do practicing physicians feel about their college education? Do they have any regrets? Do they notice any weaknesses in their education? We recently reported a study that addressed these questions.[1] From our questionnaire to 179 private community physicians (Table 1), we were able to conclude that the issue of premedical education was very important to them. Many regretted having been coerced into sacrificing this important part of their education, because of the emphasis on science. A few of the comments from our survey bear repeating.

". . . the chemistry, biology, and physics have proved useless."
". . . I would encourage others to fulfill their minimum science requirements for acceptance into medical school but major in a non-science subject to broaden one's education and exposure."
". . . encourage intensive study in literature and the arts."
". . . major in anything but chemistry and physics."
". . . actually, the humanities seemed to be the best preparation for the practice of medicine."
". . . I could not take an elective in history with the history majors because I might have made a 'B.'"
". . . there is no reason a doctor should not be an educated man."

"A survey of their colleagues leads two Athens physicians to speak out against the curricula of premedical education."

From our study of physicians' opinions (Table 2), 72% wished that more emphasis had been placed on non-science courses in college, especially

Dr. Ouzts specializes in cardiovascular diseases, and Dr. Newland specializes in pathology. Send reprint request to Dr. Ouzts, 700 Oglethorpe Ave., Athens, GA 30610.

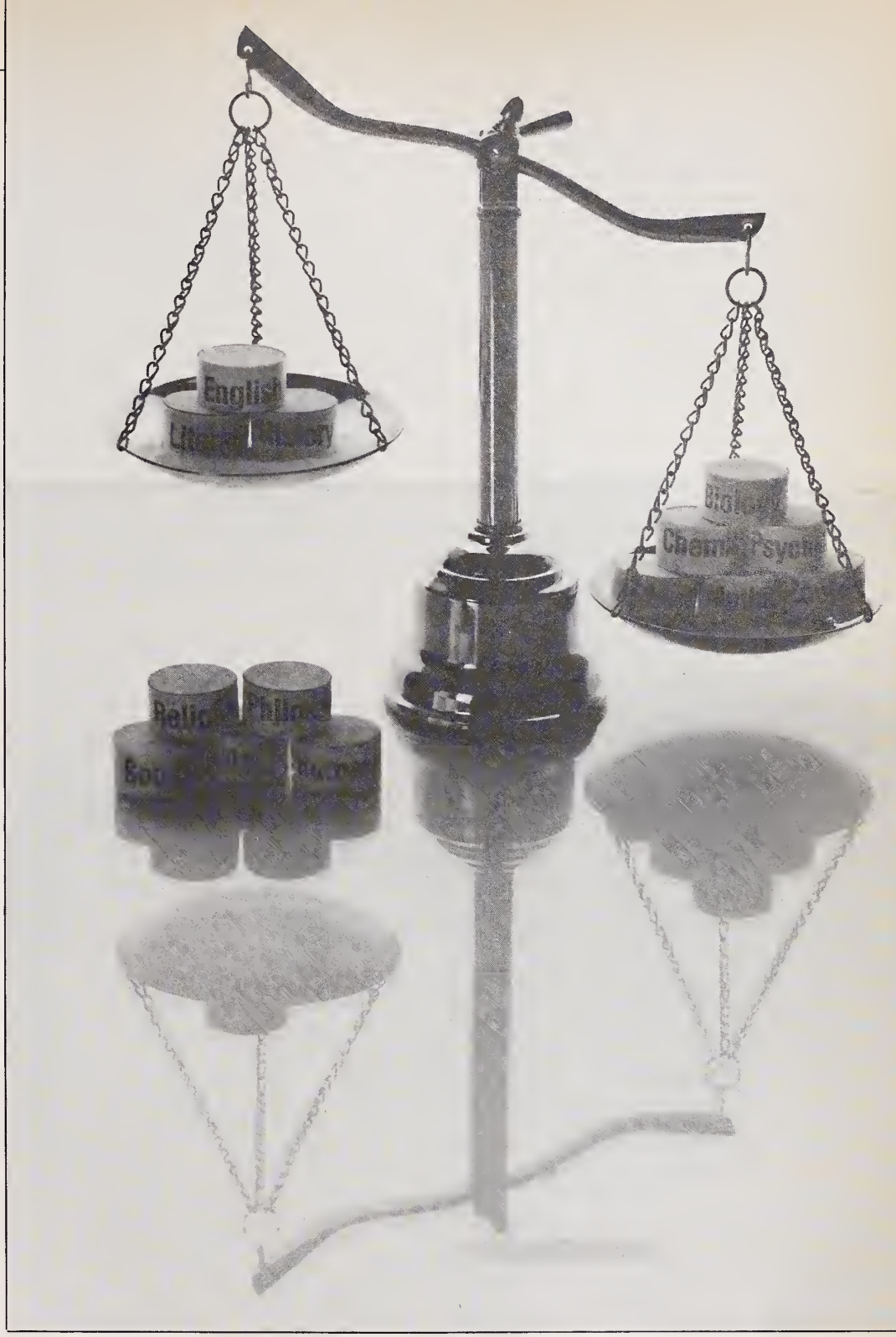


TABLE 1 — Premedical Survey

We are conducting a survey as a service to premedical education. Often a physician does not know the importance of an education until after training and assuming a role in society. We have enclosed this brief questionnaire to get your opinion of whether your pre-medical studies should have been the same or different.

1. **Type of practice: (med., surg., etc.)**
2. **Your age:**
3. **Your college degree: (AB, BS, etc.)**
4. **Subject of your major: (Biology, History, Premed, etc.)**
5. **Subject of your minor if any:**
6. **From your present perspective what subjects do you think you should have studied?**

TABLE 2 — Summary of Survey

Questionnaires mailed	179	
Questionnaires returned	112	62%
Satisfied with emphasis on science	31	28%
Not satisfied with emphasis on science	81	72%
Areas that need emphasis:		
Humanities	67*	83%
Business	34	42%
Computer	8	10%
Law	6	7%

*Some physicians suggested more than one area.

the humanities such as English, literature, writing, and philosophy, as well as such courses as business, statistics, and computers. These desires most certainly represent the weaknesses felt by the physicians.

Most college students do not recognize the value or importance of a liberal education. Many do not know that they will never again be in the surroundings of learned men with the unique set of circumstances that allows them to pursue the philosophy of Voltaire, the works of Michelangelo, or the genius of Beethoven. As the physician progresses through medical school, residency, and fellowship, the study of science is intensive and dominating. After training, the demands of patients, family, and business will be equally intensive and dominating. When professional training is complete and the physician assumes a place in society, the weaknesses that retard functions as physician, citizen, and human become apparent. However, for most physicians it is by then too late to correct these weaknesses, for the demands of

a physician's life do not allow time for other pursuits, unless a good foundation has been established during the college years. As we become older and more reflective, and perhaps introspective, we see past errors more clearly. The narrow, science-oriented college education of physicians is one of those errors.

"From our study of physicians' opinions, 72% wished that more emphasis had been placed on non-science courses in college, especially the humanities. . . ."

Are there any arguments in favor of the emphasis on college science? Two are generally discussed. First, if one takes a college curriculum heavy in science, then one may score higher on the science portions of the MCAT, and by the present standards of medical schools, this may increase chances of acceptance. Whilst we could not argue with this statement, we would ask if this should be the dominant role of college education; and is this proper criteria for selection into medical school? The second argument, and it is even weaker, is that a science curriculum in college may allow a higher grade point average during the first two years of medical school. One study[2] has supported this fact, but another larger study has shown that college science does not improve medical school grades.[3] We would agree that if one takes a course in college and repeats it in medical school, performance might be better the second time or at least it might be easier during the first few weeks of the medical school course. We do not feel these arguments justify the sacrifice of a solid college education which is so desired by most physicians.

Are the private physicians, who spend little time researching and writing, the only ones to recognize the problem? The fact is that all agree whether they are premedical advisors, researchers, or medical school deans that physicians are narrowly educated and that this is wrong. But what is the present status of the century — old opinions? We are sad to report that they continue to be ignored by medical schools as a whole. Due to the signals from medical schools which include the use of the MCAT, premedical students continue to major almost exclusively in science, and their electives are generally in science as well.[4]

How can these errors be corrected? Lewis Thomas once made these jestful but meaningful recommendations on how to fix the premedical curriculum:[5]

1. "Pre-med" majors should have their medical school applications placed in the third stack of three for admissions consideration.
2. Membership in a "pre-med society" will be grounds for rejection.
3. Get rid of the MCAT.
4. Classical Greek should be the centerpiece of undergraduate education.

Six years after Lewis' advice a major document on American Medical education was published.[6] This GPEP study conducted by leaders in education made the following recommendation regarding premedical education:

1. Students should broaden their study into the natural and social sciences and the humanities.
2. College faculties should make the pursuit of scholarly endeavor and writing skills integral features of premedical education.
3. Communication between medical school and college faculties should be improved.
4. Use of the MCAT should be limited.

Practicing physicians agree with these points and continue to wait for their incorporation into premedical education.

Recently the Johns Hopkins Medical School stopped requiring the MCAT for entrance into their school. We believe this is a good idea. Medical schools will always need some standardized test for entrance and perhaps the SAT (Scholastic Aptitude Test) or another similar test which measures the educational and intellectual level of the applicant should be substituted. In addition, we believe medical schools will have to require a certain level of achievement in the humanities equal to that emphasis which is placed on science. Perhaps a Bachelor of Arts curriculum should be required even if the major is in science. Whatever medical schools do, it is clear that they need to guide students away from so much science.

"The responsibility for the change rests with the medical schools who must send strong signals to colleges who must then institute these changes."

In summary, we believe there is no good reason for physicians to be coerced into an inadequate education or denied a liberal education in order to conform to unjustified medical school selection criteria. The responsibility for the change rests with the medical schools who must send strong signals to colleges who must then institute these changes.

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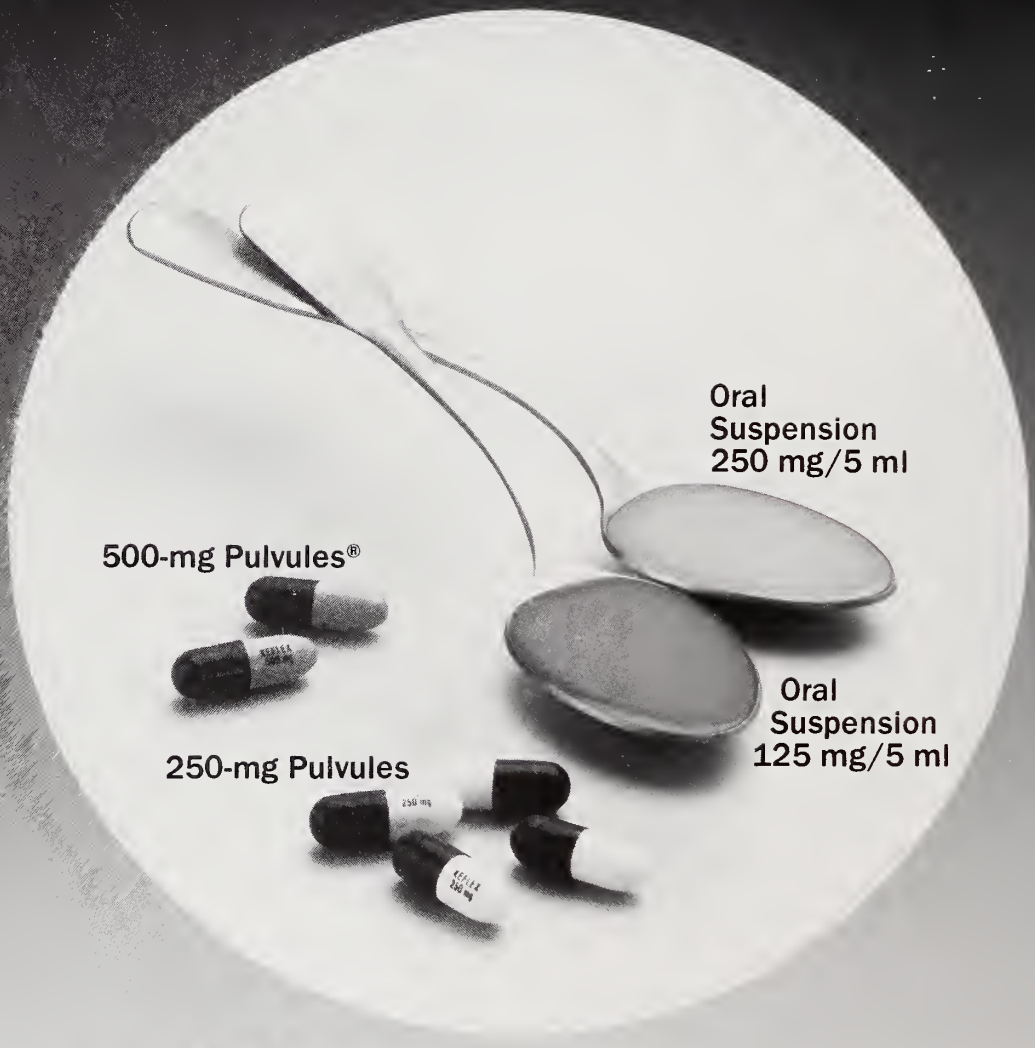
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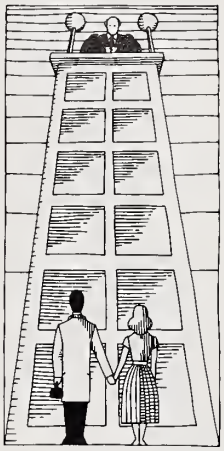
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YOU AND MALPRACTICE STRESS

II. One Physician's Story



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Editorial note:
In last month's Journal *we discussed the symptoms many physicians report when they are sued for malpractice. Here, a Georgia physician tells how he felt under the stress of litigation.*

SOME EVENTS in life produce mixed emotional reactions that are difficult to translate into well organized thoughts. Being the target of a medical malpractice suit and spending several days in court is certainly one of those events. I do not believe that anyone can go through it without some negative end results.

Allow me to make an effort to reproduce my experience with our civil justice system. Some of those that know me best, those who are closest to me, and those I've been associated with professionally will obviously have reason not to agree entirely with my views — for we all view people and events from a different perspective. The perception I have of myself is that of a reasonably well-educated, well-organized and well-trained physician. Further, I feel that I'm readily available, compassionate, concerned, and thorough physician who takes a personal interest in the delivery of the health care needs for all my patients. I hasten to add that no one recognizes better than I that I'm not omnipotent, not perfect, and certainly not immune from errors — that I am human and entirely subject to an occasional judgmental error. I am also aware that a thorough, properly planned approach to the management of any given problem is not always going to produce the desired end result.

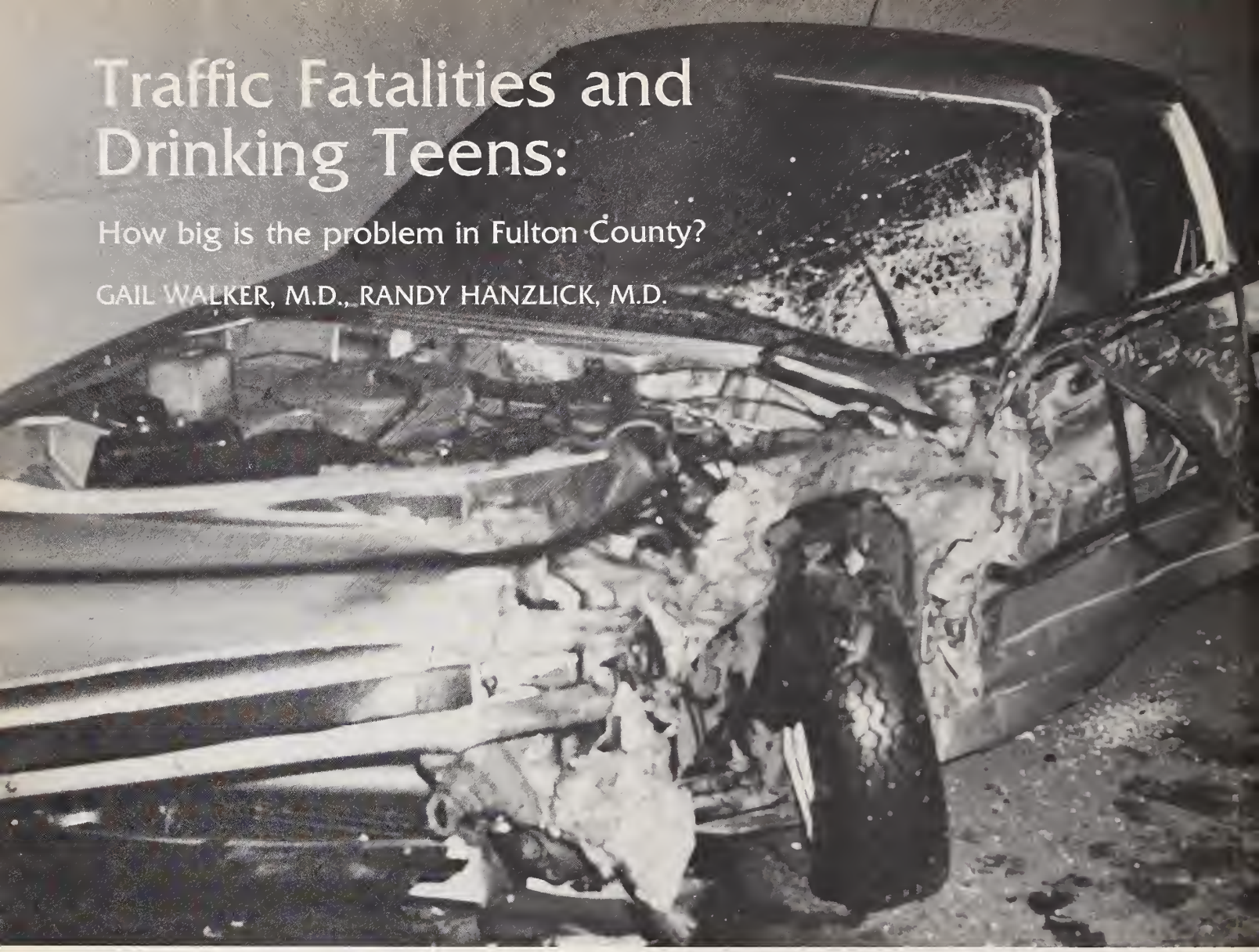
I will not bore you with the details of the events for which I was sued, but suffice it to say that I was the victim of a rare, totally unpredictable maloccurrence for which the jury decided to find a way to grant what I consider to be an exorbitant sympathy award. The tragic loss of a lovely lady to a "silent" pulmonary embolus was indeed a devastating event that took its toll on me.

Over the next 24 months, there were moments of heartache and periods of feeling very low over having lost a patient and good friend of many years. There were extended periods of insomnia, intensified by episodes of anxiety — both becoming more difficult to overcome when a group of lawyers requested copies of her office and hospital records. Months passed before another pair of lawyers became involved. Five days before the statute of limitations ran out, I was served the papers that I had presumed were forthcoming. Probably no word could better describe my initial feelings and reaction than devastation (described by Webster as being overwhelmed, wasted, or ravaged). Anger, fear of the unknown, frustration, and anxiety produced untold hours of insomnia — hours during which I agonized over questions such as: How can I best handle this burden for which I was totally unprepared? Who do I dare discuss this with? Shall I tell my family, closest friends, colleagues, professional contacts?

The next 3 years proved to be a series of events that could best be described as an "emotional roller-coaster." Through depositions, interrogations, more depositions with a 2nd "expert witness" and *interminable delays*. The psychologic stress that occurred during those 3 years included anxiety, apprehension, moments of despair, loneliness, anger, fear, insomnia, mood swings, frustration, irritability, impatience — interspersed with rare moments in which I was able to overcome all those feelings and convince myself that I have been, still am, and will continue to be a competent, caring physician.

Five years after the perpetrating event then led to 5 full days in court which was, without a doubt, the *worst week of my life!* The jury's verdict and the two million dollar award produced shock, disbelief, anger, and finally a feeling of depression that is still bothersome at times over 16 months later. The feeling of isolation, loneliness, and depression I suffered leads me to recognize the urgent need for the development of "support groups" for those who feel the need to avail themselves of such a means to overcome the uncertainties they may face as a defendant in civil justice proceedings.

Ralph A. Tillman, M.D.
OB/Gyn, Norcross



Traffic Fatalities and Drinking Teens:

How big is the problem in Fulton County?

GAIL WALKER, M.D., RANDY HANZLICK, M.D.

Introduction

RECENT PASSAGE of Georgia legislation raising the "drinking age" from 18 to 21 years of age is one outcome of increased public and governmental concern about drinking and driving. Although law enforcement agencies and the judicial system have cracked down on drinking drivers of all ages, "drinking age" legislation has essentially targeted the so-called "teenager." The present paper attempts to determine what effect such legislation may have on reducing traffic fatalities caused by teenagers driving under the influence in Fulton County.

Methods

All traffic fatalities occurring in Fulton County, by law, are required to be reported to the Medical examiner. During the 2-year period between October, 1983, and October 1985, a total of 241 traffic fatalities were reported to the Medical Examiner. Case files and police reports were reviewed to select all fatalities which were caused by persons 24 years of age or less (young drivers). In the case of pedestrians, young drivers who hit the pedestrian were included even if the pedestrian was at fault.

Traffic fatality victims were classified as pedestrians (PED), passengers in a vehicle not-at-fault (PNF), passengers in an at-fault vehicle (PAF), and drivers of a vehicle not-at-fault (DNF). In each of those categories, the traffic fatality victim was not the young driver responsible for the accident. In a fifth category, driver of an at-fault vehicle (DAF), the victim was also the young driver.

Drs. Walker and Hanzlick are with the Office of the Medical Examiner, Fulton County; and Department of Pathology and Laboratory Medicine, Emory University School of Medicine. Send reprint requests to Dr. Hanzlick at 50 Coca Cola Place, SE, Atlanta, GA 30303.

TABLE 1. Summary of 64 Traffic Fatalities Caused by Drivers Between 16 and 24 Years of Age Showing Numbers of Drivers Observed to be DUI, and Maximum Numbers Which Could Have Been DUI in Each Age Group.

		Deaths Caused by Drivers Ages 16-20		*Deaths Causes By Drivers Ages 21-24*	
	Total Deaths	*Observed DUI*	*Worst Case Scenario*	*Observed DUI*	*Worst Case Scenario*
DAF	102	4 (4%)	12 (12%)	10 (10%)	12 (12%)
DNF	17	0	2 (12%)	2 (12%)	5 (30%)
PAF	32	2 (6%)	10 (31%)	3 (9%)	8 (25%)
PNF	14	3 (21%)	4 (29%)	0	1 (7%)
PED	67	1 (1%)	2 (3%)	2 (3%)	8 (12%)
Total	232	10 (4%)	30 (13%)	17 (7%)	34 (15%)

In order to more specifically define the problem of drinking teenage drivers (and the potential impact of raising the drinking age to 21 years), the group of young drivers was divided into one group of persons ages 16 through 20 years and a second group of persons 21 through 24 years of age. Each group was then analyzed separately.

In the instance where the traffic fatality victim was the young driver him (her) self, blood alcohol data were generally available in the Medical Examiner's files, since the young drivers were autopsied. Young drivers with known, valid, representative, and negative blood alcohol levels were excluded from the study (5 cases). In many instances, the traffic fatality victim was someone other than the young driver, and the young driver survived. For that reason, police reports were required to determine the young drivers' alcohol/intoxication status. It became apparent in reviewing police reports that police officers do not uniformly or routinely perform DUI tests on all drivers. As a result, the authors chose to take a "minimum/maximum" approach to the problem. On the minimum side, all surviving young drivers whose police reports indicated a positive blood alcohol level, or whose report indicated "driving under the influence" were designated as "observed DUIs." On the maximum side (the worse case scenario), the authors assumed that all police officer opinions were incorrect and that all young drivers who survived and were not DUI tested were actually intoxicated. Thus, a range was established with observed DUIs at the low end and worst case scenario at the high end; reality being undefined and probably falling somewhere in between.

Results

Of 241 traffic fatalities during the 2-year period, four files were incomplete, and five cases were "hit and run" cases, where the at-fault driver could not be identified. Thus, 232 files were available for complete study.

Table 1 illustrates the "Observed DUI" and "Worst Case Scenario" data categorized by fatality type. Sixty-four fatalities (28% of all traffic fatalities) met the criteria and were potential DUI cases. Thirty (13% of all traffic fatalities) were caused by drivers ages 16 through 20 years of age, and 34 (15% of all traffic fatalities) were caused by drivers ages 21 through 24 years old.

In terms of actual intoxication, 4% of all traffic fatalities were observed to be caused by drinking drivers between the ages of 16 and 20 years, while 7% were observed to be due to drinking drivers between the ages of 21 and 24 years. Operating under the "worst case scenario," 13% and 15% of traffic fatalities were due to drinking drivers in the younger and older age groups, respectively. Thus, drinking teenagers appeared to be responsible for 4% of traffic fatalities, but could have been responsible for 13% if all police evaluations were incorrect and all teenagers not DUI tested were actually intoxicated.

Discussion and Conclusions

Reports of the incidence of alcohol-involved traffic fatalities for drivers of all ages vary widely and range from about 41% to 91%, depending on the population studied and the criteria used for selection.[1-5] Fulton County data indicate that about 67% of drivers who caused accidents and were killed had positive blood alcohol tests, while about 54% of all traffic fatalities test positive for blood alcohol.[6] By comparison, if Fulton County data are representative, traffic fatalities caused by drinking teenager drivers between 16 and 20 years of age are rare relative to other driver age groups. Data from the Fatal Accident Reporting System (FARS) for 1983 indicate that about 13% of all traffic fatalities involved drinking drivers between the ages of 16 and 24 years,[3] while other studies indicate a 20% to 28% incidence.[4] It should be pointed out that many of the larger scale studies have analyzed drivers in the 16 to 24 year old age group and have not specifically looked at persons ages 16 through 20, the group at which drinking age legislation is targeted.

Data in the present study indicate that nearly one half of the drivers in the 21 to 24-year age group were observed to be DUI, while about one third of the 16 to 20 year age group were observed to be DUI. Further, the younger "teenage" age group covered a wider age range than the older group yet was responsible for fewer fatalities and fewer observed DUI related fatalities. Thus, in Fulton County, the 21 to 24-year age group appeared to account for relatively more offenders than the true teenager group.

The authors wish to emphasize that the present paper concerns itself only with traffic fatalities and does not consider non-fatal accidents caused by drinking teenagers which result in serious or permanent injury. Further, the data reflect only Fulton County and may differ from other geographic locations and socio-economic conditions. In Fulton County, 100% compliance with drinking age legislation can be expected to reduce traffic fatalities by 4% to 13% per year in the

short term (approximately 5 to 15 cases per year). If drinking age legislation causes lifetime reduction in alcohol consumption by teenagers affected by the legislation, then a greater long-term cumulative reduction in traffic fatalities may be realized. In the meantime, it would seem prudent and more effective to consider alternatives to reduce drinking and driving in older age groups, who account for far more alcohol-related traffic fatalities than teenagers.

In order to collect a more definitive data base for study, the authors recommend that police officers and health care professionals, if logistically possible, perform blood alcohol determinations on all drivers involved in vehicular accidents. Finally, the role of other commonly abused drugs such as cocaine and marijuana should be fully investigated.

"The authors recommend that police officers and health care professionals, if logistically possible, perform blood alcohol determinations on all drivers involved in vehicular accidents . . . (and) the role of other commonly abused drugs such as cocaine and marijuana should be fully investigated."

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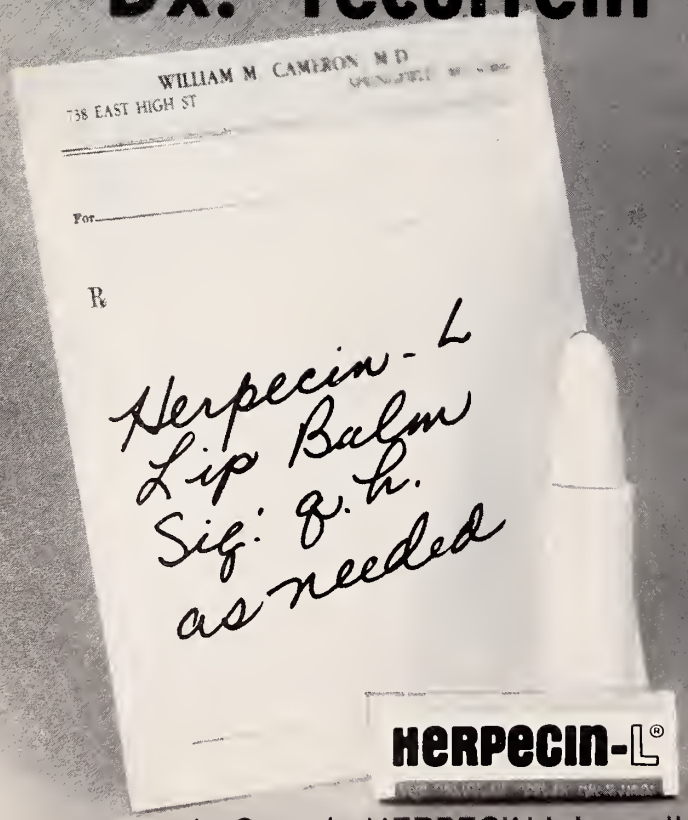
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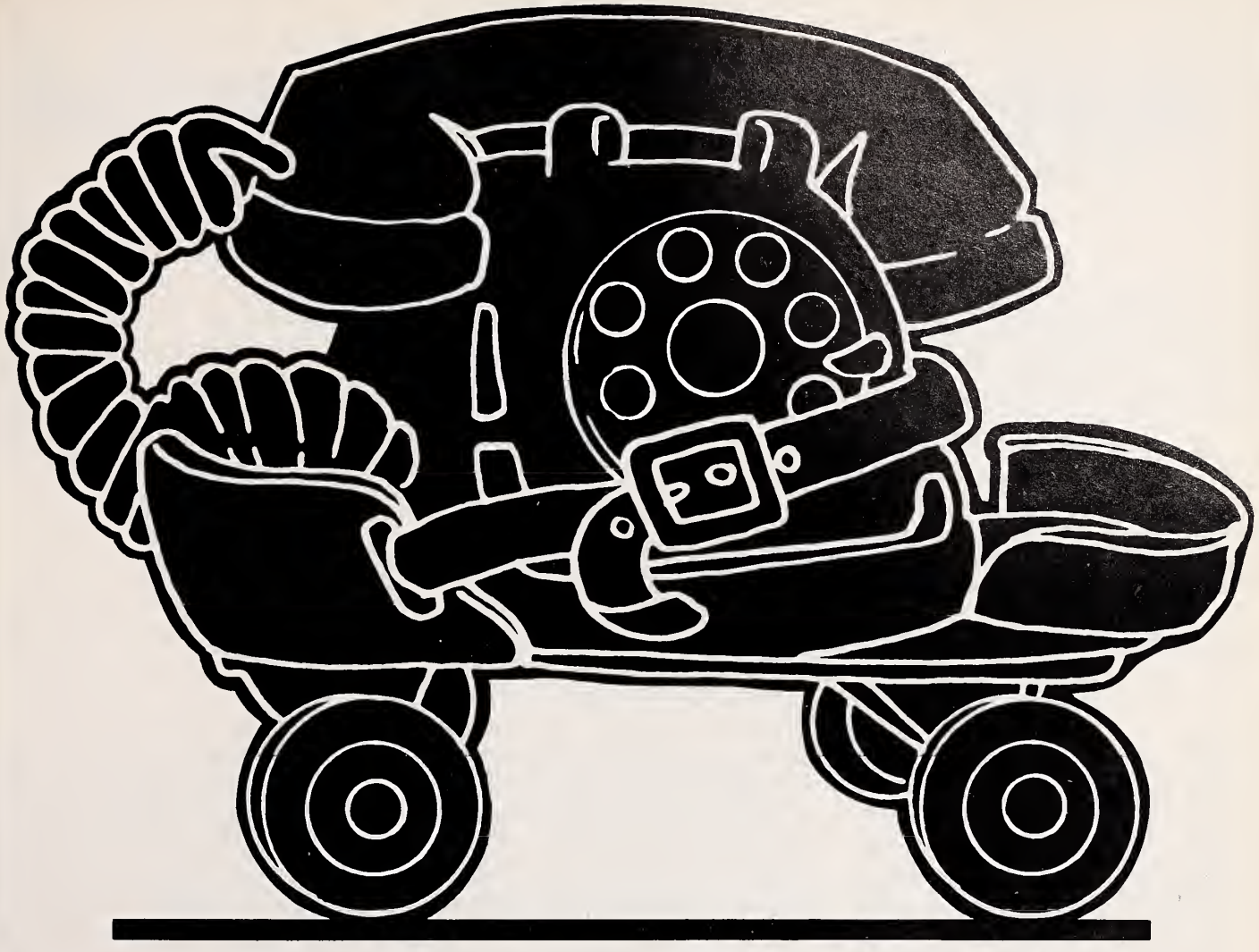
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KNEE ARTHROSCOPY FOR THE NON-ORTHOPAEDIST

LEROY R. FULLERTON, JR., M.D.

An explanation of current indications and diagnostic and operative techniques.

Since its clinical advancement by Watanabe in Japan in the 1950s, arthroscopy has become a valuable and frequently used procedure to evaluate and treat a variety of knee problems. The efforts of Dr. Robert O'Conner and others in the 1960s led to improved techniques and to specialized new instruments. Over the last 10 years, nearly every orthopaedic surgeon has had exposure to and training in diagnostic arthroscopy. There are now a growing number of orthopaedists who are skilled in the advanced technique of operative arthroscopy of the knee. The purpose of this paper is to explain the current indications and techniques for diagnostic and operative knee arthroscopy.

Diagnostic Arthroscopy

There are numerous indications for diagnostic arthroscopy. Evaluation of suspected internal derangement of the knee is a frequent acute indication for this procedure. Diagnoses commonly made in this setting include torn menisci, cruciate ligament injuries, chondral fractures, and loose bodies. Arthroscopy is being done more frequently for acute hemarthroses in the stable knee.[1] This requires irrigation until the joint is clear, but it often provides early accurate diagnosis. Knowing the diagnosis in the early stage of an injury allows immediate operative arthroscopy or provides information for planning arthrotomy. It also facilitates more vigorous rehabilitation in the absence of serious injury.

In those knees with chronic symptoms of locking or giving way, arthroscopic examination is often useful in identifying old or degenerative meniscal tears. Loose bodies are frequently visualized. Chronic ligamentous injuries, synovitis, and degenerative articular changes are easily diagnosed. Such problems as osteochondritis dissecans can be better understood by direct visualization.

Finally, in that group of patients with chronic knee pain without objective abnormality on repeated examination, an arthroscopic assessment can provide documented direct examination of the joint. This information then can be used to reaffirm previous recommendations or to modify treatment plans accordingly.

Operative Arthroscopy

The indication for operative arthroscopy is the existence of an internal knee lesion which requires operative intervention. A wide variety of procedures to include meniscal resection, loose body removal, debridement, synovectomy, lateral release, and plical resection are frequently amenable to surgery under arthroscopic control. Specialized treatment techniques such as meniscal repair, abrasion chondroplasty, cruciate ligament stapling, and anterior cruciate augmentation are presently being done by experienced arthroscopists in many areas of the country.

Equipment

Although arthroscopic instruments are continuing to evolve, there is a basic kit. The standard arthroscope is in the 4 mm to 5 mm diameter range. The basic telescope is angled 30 degrees from its longitudinal axis. An additional 70 degrees arthroscope is often used for examing the posterior compartments of the knee. Fiberoptic light cables carry light to the arthroscope from a separate light source. There are a variety of hand instruments that are frequently used. These include the probe with a right angled tip which provides the surgeon with proprioceptive feedback as well as the means to palpate all areas of the joint. In addition, several sharp knives are used by most surgeons. The use of specially constructed arthroscopic

Dr. Fullerton is an orthopaedist. Send reprint requests to him at 3623 J. D. Gray Circle, Suite 207, Augusta, GA 50909-1896.

scissors, basket biopsy forceps, and a grasping forcep completes the basic setup. Small motorized instruments enable cutting the meniscus, remaining synovium, and drilling or abrading abnormal cartilage through the arthroscopic portals. Finally, a video system which includes a lightweight arthroscope mounted camera, television monitor, and often a video cassette recorder is used to guide the surgeon and his assistants and to record the findings for study, documentation, and patient education.

Anesthesia

The choice of anesthesia depends on the nature and medical condition of the patient as well as on the type procedure being performed.

Preoperative medication is not usually necessary. Local, regional (spinal), or general anesthesia are all used for diagnostic arthroscopy. Although certain operative arthroscopies can be done under local anesthesia, general anesthesia usually facilitates the procedure for both the surgeon and the patient. It also allows an accurate examination under anesthesia and arthrotomy, should it be necessary. Other advantages of arthroscopy under general anesthesia include reduced operating time, less need for supplemental medications, and a more predictable recovery.[3]

Technique

A tourniquet is not essential for diagnostic procedures, but its use often makes it easier. Likewise, a rigid thigh holder is used by many surgeons to facilitate stressing the knee to improve exposure. Portals are made by one-quarter inch stab wounds. Common sites include a fluid inflow portal at the superior pole of the patella through which the joint is distended with approximately 60 cc's of fluid. The usual working portals are just superior to the joint line. The arthroscope is initially placed lateral to the patellar ligament. A probe is then inserted along the medial joint line. Various other approaches, including through the patellar ligament (central), posterior, and superior locations, are used as needed. The examination is then conducted systematically starting in the suprapatellar pouch and proceeding in order to the medial compartment, intercondylar notch, and lateral compartment. All areas are probed. The posterior lateral portion of the joint is usually seen from these standard portals. In order to visualize the posteromedial joint line and the posterior cruciate ligament, the arthroscope can be passed form the anterolateral portal through the intercondylar notch adjacent to the anterior cruciate ligament. The 70° arthroscope is useful for this part of the examination. These instruments and techniques eliminate the so-called blind spots of the knee and lessen the indications for arthrography. If a television system is used, the representative portions of the examination can be recorded. Operative treatment of the various lesions encountered is accomplished using the technique of triangulation. This method of using external clues to orient instruments speeds surgery and lessens the change of iatrogenic injury. Using a combination of instruments previously described, damaged tissue is removed or repaired. The procedure can last from 10 minutes to about 2 hours. At the end of the procedure, the joint is irrigated and drained. Some surgeons inject a local anesthetic at this point. A compressive dressing is applied over the stab wounds which most often do not require suture closure. If the tourniquet has been used, it is released. The procedure is over.

Postoperative Management

The patient is encouraged to begin immediate active motion and isometric exercises. For the first 2 days, the knee is kept elevated and iced when the patient is not exercising or walking. Weightbearing to tolerance is encouraged with crutches or a cane, used as necessary. Minimum postoperative analgesics are needed. Usually, swelling resolves by the 4th week. Many patients return to normal daily activities by the 6th week. Athletic patients are often running and participating in their sport earlier than the 6th week.

Problems and Complications

Although arthroscopy has had minimal complications, the risks of anesthesia must always be remembered. Interoperative problems that infrequently occur include instruments breakage, ligament injury, and cartilage scuffing. There is an extremely low incidence of infection with this procedure, with reports of the 0.5% or lower range being common.[3, 5] Thrombophlebitis is an infrequent occurrence postoperatively. Occasionally, transient paresthesias follow use of the tourniquet.

Summary

Diagnostic and operative arthroscopy of the knee is a common, safe, and effective method of diagnosing and treating a variety of knee problems. Diagnostic accuracy for the experienced arthroscopist is over 95%.[4] Although studies suggest the long-term results are similar to those of treatment via arthrotomy, the decreased discomfort, rapid return to normal activity, and low complication rate make arthroscopy an attractive approach to many common knee problems.[5] In addition, for the surgeon with the unique motor skills and interest, treatment of a wide variety of more complex knee problems is now possible under arthroscopic control.

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Adolescent Suicide: A Geometric Increase

ALFRED A. MESSER, M.D.

ADOLESCENT SUICIDES last year claimed 13.3 lives for each 100,000 members of the 15 to 24-year-old population. These are official public health figures. Unofficially, the rate is probably double, because medical examiners sensitive to a family's shame will sign the death certificate as "Accidental Death."

"The rate of 13 per 100,000 adolescent suicides represents a 250% increase over 2 decades."

The rate of 13 per 100,000 represents a 250 per cent increase over 2 decades. Suicide is second only to all types of accidents as the leading cause of death among this age group. The rate for adolescent males is 19 per 100,000; for females, 6 per 100,000. It is estimated that five times as many females make suicide attempts as do males.

A November, 1985, report from Bronx's Montefiore Hospital describes a survey of 382 youngsters (ages 14-18) from a high school for the intellectually gifted. Nine percent (33 of 382) had made at least one suicide attempt; less than half had come to professional attention *before or after* the attempt.[1]

Suicide attempts are made by adolescents from every socioeconomic group: rural and urban, black and white, hispanic and oriental. In the United States, Nevada has the highest rate, New Jersey, the lowest. Worldwide, the highest suicide rate is in Hungary, the lowest, Mexico.

National preoccupation with teenage suicide peaks each time the press reports a cluster of suicides in one city or a school. The public wants answers for the cause and prescription for a cure. None is immediately forthcoming. There is no single cause for suicide; rather, there is a complex interplay of personal, family, social, and economic factors.

A 1980-1983 study at the University of Louisville Child Psychiatric Services reports no correlation between high suicide rate and parental divorce or separation, parental dependency on drugs or alcohol, overcrowding of the home of large numbers of children, poor academic performance, or dropping out of school.

Dr. Messer practices psychiatry. Send reprint requests to him at 3332 Valley Rd., Atlanta, GA 30305.

The study reveals a positive correlation between vulnerability to suicide and teenagers who use drugs and alcohol frequently, who have engaged in antisocial behavior such as minor criminality, and those who have experienced death of parents, relatives, or friends. If the other's death was itself by suicide, the incidence is even higher, perhaps because the teenager has a fantasy of reunion through death.[2]

Thoughts of Death

Almost every teenager who does commit suicide has previously attempted it, issued threats to do so, or indicated a wish to die. Charles, 18, killed himself with a rifle in his room while his family was away one afternoon. They were devastated that this "clean-cut, fun-loving" boy had destroyed himself. There were no notes. On psychological autopsy — interviews with family and friends after his death — the father recalled that Charles had recently become interested in guns and wanted to know the effectiveness of different types of loading action. Further, Charles had shown his parents a collection of stories and pictures about burial of the remains of men who had previously been listed as missing in action in Vietnam, "and their glory in death."

Susan, 17, a high school junior, left a suicide note: "Please take good care of my cat." Susan's family said she was always morose but livened up when she bought a new ribbon for her cat. She avoided human contact. Her school themes had recently dealt with the "reliability" of animals, that humans were "hopeless." She told friends her idea of "heaven" would be to have her own private zoo with no people around.

"National preoccupation with teenage suicide peaks each time the press reports a cluster of suicides in one city or school."

Since we believe suicidal intent is always conveyed in some manner before the fatality, suicidologists have arrived at a consensus of clues that warrant concern by parents, teachers, and friends. Family physicians must be especially alert. The dominant mood of the teenager prone to suicide is mental depression. During adolescence, transient depressions are almost as frequent as the common cold. The following symptoms suggest deeper depression: feelings of worthlessness and hopelessness; persistent insomnia or need for excessive sleep; trouble concentrating; sudden change in appetite with excessive weight loss or gain; constant fatigue; loss of interest in friends, activities, and school; sudden changes in grooming; hypochondriacal complaints, and often, after seeing a doctor, anger that the physician found "nothing wrong"; and increasing use of drugs and alcohol.

Still, any of these symptoms are not infrequent as part of adolescent turmoil during the difficult "between years." Of more concern: preoccupation with death and dying (statements such as, "I'll be better off dead" or "you won't have to worry about me much longer," even choosing suicide as a subject for a term paper); giving away prized possessions and "good-bye behavior"; excessive risk-taking (possibly self-destructive) behavior, particularly with automobiles, motorcycles, and firearms.

The 1985 suicide of four teenagers at one Omaha high school drew front-page attention nationwide and the labelling of that school by its students as "Suicide High." Parents interviewed on television were confused and panicked. Suicidologists were invited to the school for assemblies and small group discussions about separation, grief, and mourning with both generations. Sessions were held about students' needs to develop self-awareness, empathic communication, and personal alternatives and resources to meet challenges and crises more constructively. All who attended learned that 60% of all teenagers have thoughts of self-destruction from time-to-time and therefore, to say this out loud to family or friends is not tantamount to having a severe mental breakdown. Parents learned that they could tell their adolescent of concern with statements like, "I'm worried that you're depressed because you can't seem to sleep. Can we talk about it?"

These sessions had the effect of binding different families and school closer together. A century ago, Emile Durkheim, the French sociologist, who is the "father" of suicide study, wrote, "Suicide is less where an individual feels closely integrated with his culture."[3]

These sessions also help teachers and counselors identify other students who might be at risk for suicide. No one knows better about who is suicide-prone than another student with the same preoccupation. Publicity about suicides results in "modelling behavior." In one Connecticut hospital, 12 teenagers were admitted for overdoses in the 2 weeks following a 1985 ABC television movie about suicide, "Surviving." In a comparison period, 2-4 might be admitted. Despite the risks, educational benefits of suicide programs makes the publicity worthwhile.

Family Factors

Susan's suicide note asking that the parents attend to her cat could be interpreted as "Please pay more attention to my cat than you did to me." Other suicide notes and poems of teenagers echo this sentiment: the lack of attachment and intimacy with parents.

Ralph's father was a self-made industrialist who had little time for his family except on boating vacations. Sixteen year-old Ralph and an older sister turned to their mother for support and reassurance. She functioned as mother and father. When Ralph complained of difficult days at school, his mother would say, "Look, you're brighter than any of your friends, dig in and you can make it." When Ralph was sleepless with worry about exams, his mother often gave him a sleeping pill. One morning the mother couldn't awaken Ralph and concluded the boy took several pills. She called her sister-in-law, a nurse in a distant city, who advised the mother to physically help Ralph out of the bed to "walk it off." The nurse insisted that the family arrange for Ralph to see a counselor, but this did not happen.

"Since we believe suicidal intent is always conveyed in some manner before the fatality, suicidologists have arrived at a consensus of clues that warrant concern by patients, teachers, and friends."

A month later, Ralph repeated the act, but this time his breathing seemed labored, and the mother called an ambulance. Ralph was treated for an overdose. His father was summoned; denial of Ralph's problems was no

longer possible. Psychiatric treatment was begun involving the family, and Ralph is doing well.

During treatment, Ralph often said he was "dead in the water," an analogy to the day-to-day lifeless interaction in his family. Ralph's parents demonstrate a common finding among parents of teenage suicide attempters; they want the youngster to feel close to them, but not to be emotionally demanding.

The father of a 17-year-old who attempted suicide said in bewilderment, "But he always smiled." "Only because you made him," interjected the mother. The story: whenever there was a discussion between father and son, no matter what the subject, the parent insisted at the end, "Now, let me have a great big smile." The boy was not "allowed" to experience rage and frustration which he might resolve on his own later on. Why didn't the mother intervene? "I don't like fusses with my husband." The son's chronic depression was related both to his inability to cope with his rage, and a need to hold on to his parents, as he didn't feel ready to cope with the world on his own.

Parental divorce need not have lasting effects on children as has been shown in a 10-year study by the Judith Wallerstein group in San Francisco. However, there is one particular group of adolescents more prone to severe depression and, therefore, suicide: those who have lived through disruptive marriages followed by bitter divorce and custody fights between the parents. As children, they felt guilty that they were responsible for the parents' breakup. They tried to reunite the parents, and when that failed, they felt ashamed, different from other children, and depressed when they heard stories of happy family life. They were left emotionally vulnerable to separation later on.

My experience with Lisa is illustrative. I treated her at age 10 because she cried frequently, sucked her fingers, and addressed her classmates in baby talk. Placed with her mother after a nasty custody battle, Lisa saw her father and brother on weekends. During a family interview, Lisa sobbed and said she wished all her family could be together again. I explained the facts of the divorce to Lisa, told her it was not her fault, and that both parents would always love her.

Eight years later, Lisa was referred to me by her college. She was failing three courses, she was morose; three roommates had insisted on moving out of her suite because Lisa informed each, "You're my friend and nobody else's."

Unknown to the school, Lisa had chalked up two suicide attempts, both after romantic failures. Each time she was unable to reconcile with a boyfriend, Lisa's experience of inability to reconcile the parents was awakened, with profound feelings at failure again. Suicide became an option.

No discussion of suicide today could be complete without noting a cultural change: articulate groups of people advocate suicide as a rational alternative to life rather than suicide being shameful and sinful. This doctrine reached it zenith in 1979 when Jo Roman, a New York artist and psychotherapist, was diagnosed as having cancer and decided to kill herself rather than seek any medical treatment. Under the seductive banner, "Your life belongs to you," she systematically gave away her possessions, bade farewell to her friends, and one evening, while her husband sat downstairs, went upstairs and took her fatal overdose. She wrote extensively and her story became a documentary on Public Broadcasting entitled, "Choosing Suicide." She sent her notes to the *New York Times*, and her saga was presented on page one as the journey of a pioneer. She said: "I don't want to have a day of pain. I don't want to have a minute of pain." Thus, a personal concern about cancer was resolved by suicide.[4]

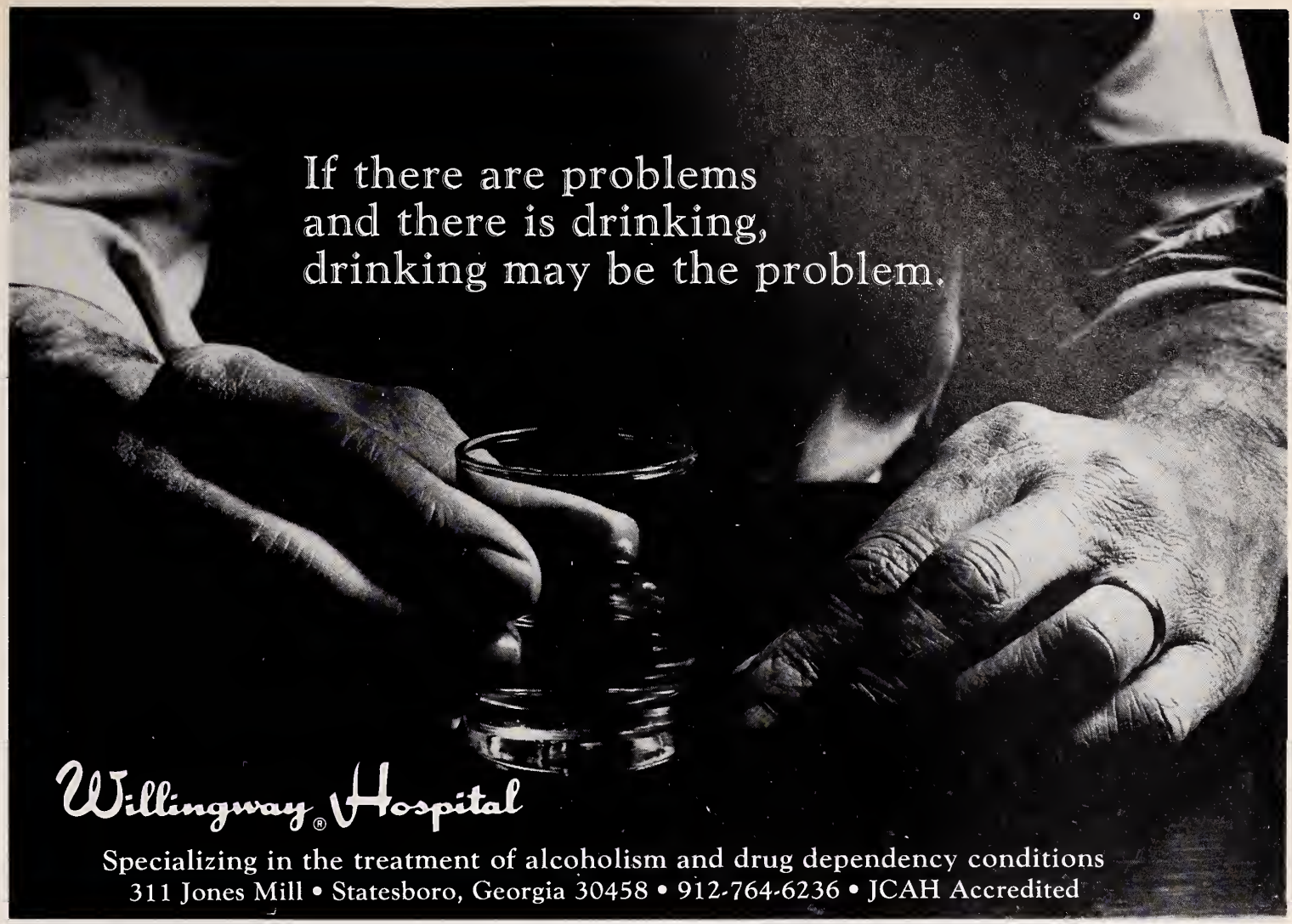
Perhaps the appropriate answer was emblazoned on T-shirts of the Omaha high school students as they talked about responsibility for each other and sought new ways to confront crises: Choose Life.

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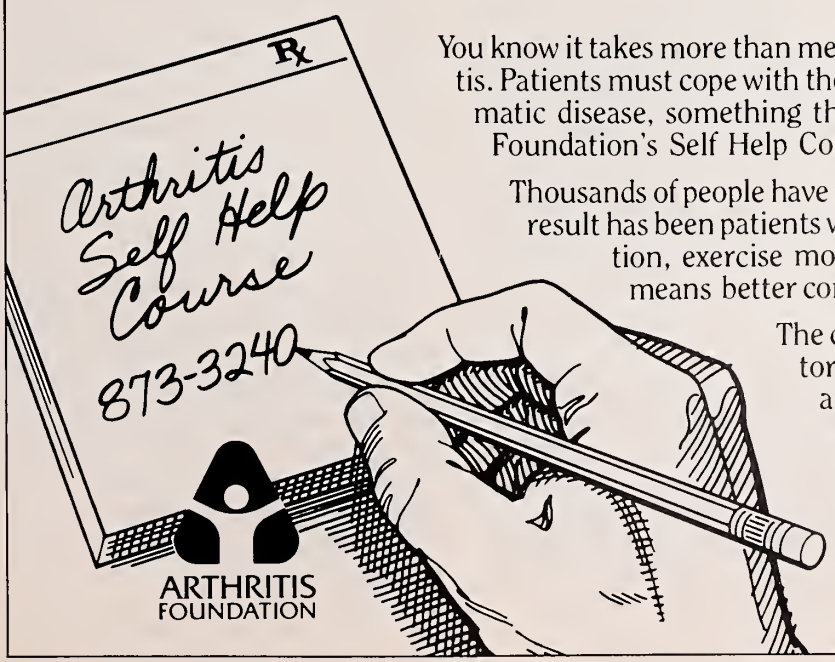
"Parental divorce need not have lasting effects on children as has been shown in a 10-year study . . . however, those children more prone to severe depression and, therefore, suicide, are those who have lived through disruptive marriages followed by bitter divorce and custody fights."


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SECONDARY BACTERIAL PERITONITIS

RUTH-MARIE E. FINCHER, M.D., JOSEPH W. GRIFFIN, JR., M.D.

Successfully treated with parenteral antibiotics and periotoneal lavage.

SECONDARY bacterial peritonitis is associated with a high mortality rate if the cause of the intraabdominal catastrophe is not recognized and treated surgically.[1] We recently cared for a patient who clinically had secondary peritonitis and was successfully treated with parenteral antibiotics and peritoneal lavage with an antibiotic solution.

Case Report

A 42-year-old woman was admitted with a history of active alcoholism, a 6-month history of increasing abdominal girth, a 2-week history of dyspnea, and a 1 week history of abdominal pain. Physical examination revealed a cachectic, alert, chronically ill-appearing woman with a blood pressure of 125/82, pulse 120 per minute, and temperature 36.6° C. The abdominal examination revealed distention with tense ascites, diffuse tenderness to palpation, and normally active bowel sounds. Pelvic examination was unremarkable, with no tenderness or palpable mass. She had 1+ pretibial edema and a grade II/VI systolic murmur best heard at the right upper sternal border. There were no focal neurologic signs and asterixis was not present.

Initial laboratory results included hemoglobin of 7.9 gm/dl and a white blood cell count of 17,700, with 92 polymorphonuclear leukocytes (PMN), 1 band, 3 lymphocytes, and 3 monocytes. Urinalysis was normal except for 2+ protein. Subsequent urinalyses showed only trace or no protein. Biochemical studies were remarkable for an SGOT of 38 IU/L, LDH 295 IU/L, albumin 2.0 gm/dl, total bilirubin 1.3 mg/dl, alkaline phosphatase 138 mu/ml, SGPT 12 mu/ml, and gamma GT 66 mu/ml. Prothrombin time was 13.9, with a control of 12.2 seconds. Supine and upright x-rays of the abdomen demonstrated a non-specific bowel gas pattern with evidence of ascites, but no free air was seen within the peritoneal cavity. Paracentesis results are shown in Table 1. A diagnosis of spontaneous bacterial peritonitis was made and treatment was begun with ampicillin 1 gm intravenously every 6 hours and gentamicin 60 mg intravenously every 8 hours. Blood and peritoneal fluid cultures were subsequently sterile and fluid cytology negative. Because of lack of clinical improvement after 3 days, Clindamycin 300 mg intravenously every 6 hours was added for anaerobic coverage. On the 4th hospital day, the patient had a generalized seizure. Evaluation included a computerized tomographic (CT) scan of the head which was normal except for mild cortical atrophy. A lumbar puncture revealed no white blood cells, a glucose of 50 mg/dl with concomitant serum glucose of 95 mg/dl, and total protein of 16 mg/dl. Gram, acid fast, and fungal stains were negative, and cultures were sterile. On the 5th hospital day, the patient remained afebrile but had persistent leukocytosis of 19,100 and abdominal tenderness. Results of repeat paracentesis included a white blood cell count of 32,300 and cultures positive for *E. coli* (Table 1).

> ***"Secondary bacterial peritonitis is characterized by both a significantly higher ascitic fluid leukocyte count and higher mortality than spontaneous bacterial peritonitis."***

Drs. Fincher and Griffin are from the Department of Medicine, Sections of General Internal Medicine and Gastroenterology, Medical College of Georgia, Augusta, GA. Send reprint request to Dr. Fincher, Department of Medicine, BD 141, Medical College of Georgia, Augusta, GA 30912.

This paper was presented at the Georgia Gastroenterologic Society Annual Meeting, Callaway Gardens, Georgia, October, 1985.

TABLE 1 — Response of Peritonitis to Treatment

Hosp. Day	Antibiotic Therapy	Peripheral WBC	Fluid WBC	Serum LDH	Fluid LDH	Serum Protein	Fluid Protein	Fluid gram Stain	Fluid Culture
1	Ampicillin Gentamicin	17,700 (92% PMN)	3,700 (86% PMN)	295	2,388	7.0	4.2	Many WBC's; rare gram negative bacilli	No growth
3	Clindamycin added	23,000 (92% PMN)							
5		19,100	32,300 (94% PMN)	290	4,000	6.4	4.2		E. coli
14	Dialysis with Gentamicin Solution	14,700 (92% PMN)	46,530 (94% PMN)	292	11,312	6.6	4.5	Many WBC's	No growth
20	None	8,800	30,000 (96% PMN)						

Because of a lack of clinical response and the escalation of peritoneal fluid white blood cell count, extensive evaluation for a intra-abdominal source of bacterial peritonitis was undertaken. Abdominal sonogram was suggestive of a retrouteral abscess, but abdominal and pelvic CT scan showed no discrete abscess. CT scan also showed a normal-sized spleen and minimally enlarged liver with a smooth surface and homogeneous uptake. Repeat pelvic examination was normal. A gallbladder sonogram was normal, and gastrografin swallow and enema revealed no evidence of perforation. Because of lack of definite evidence of an abscess or ruptured viscus and because of the patient's poor nutritional status, she was continued on antibiotic therapy without surgical intervention.

"Because of a lack of clinical response and the escalation of peritoneal fluid white blood cell count, extensive evaluation for an intraabdominal source of bacterial peritonitis was undertaken."

After 14 days of parenteral antibiotic therapy, abdominal examination was unchanged, and paracentesis revealed a white blood cell count of 46,530 (Table 1). Inadequate response to broad-spectrum antibiotic therapy was evidenced by peripheral leukocytosis and persistent marked elevation of the ascitic fluid white blood cell count. Surgical consultation was requested for exploratory laparotomy to attempt identification of a source for the patient's peritonitis. However, exploration was not undertaken because of concern that the patient's poor nutritional status would preclude adequate wound healing. As an alternative to surgical drainage, the patient underwent peritoneal lavage with a gentamicin-containing solution via a Tenckhoff catheter. Lavage was performed continuously with gentamicin 4 mg per liter normal saline at 200 cc/hour, and parenteral antibiotics were continued. Lavage with the antibiotic solution was discontinued after 6 days because of technical problems with the Tenckhoff catheter. At that time, peripheral white blood cell count had decreased to 8,800 with a normal differential. Renal function remained normal with serum creatinine of 0.8 mg/dl, and serum ablumin had risen to 3.0 g/dl. Following discontinuation of all antibiotic therapy, the patient's ascites did not reaccumulate, the abdomen was nontender to palpation, the peripheral white blood cell count remained normal, and she was discharged from the hospital on the 36th hospital day.

Six weeks later, the patient's physical examination was unchanged, and white blood cell count was 7,300. An echocardiogram revealed significant tricuspid regurgitation with normal mitral valve. Right ventricular ejection fraction estimated by MUGA scan was 29%. Cardiac catheterization showed severe tricuspid regurgitation and a small ventriculo-septal defect (VSD) with no evidence of constrictive pericarditis. She subsequently underwent successful replacement of the tricuspid valve and closure of the VSD.

Discussion

Spontaneous bacterial peritonitis (SBP) is a well-described, not uncommon complication of long-standing cirrhotic ascites.[2-4] Because parenteral administration of antibiotics results in therapeutic levels in the ascitic fluid, Gerding[5] has suggested that intraperitoneal installation of antibiotics is not routinely indicated in the treatment of SBP. Caralis[1] recently emphasized the therapeutic importance of differentiating between spontaneous and secondary bacterial peritonitis. Among 21 patients with bacterial peritonitis, seven had an identifiable secondary cause, most commonly perforated ulcer. Despite treatment with parenteral antibiotics, the only survivors in his group were the two patients who underwent surgical drainage. Although the manifestations of bacterial peritonitis are protean,[2, 6] Caralis[1] reported that the

mean ascitic fluid white blood cell count in patients with secondary peritonitis was significantly higher than in patients with SBP (23,750 vs. 1,757).

"Peritoneal lavage is not routinely recommended for drainage of purulence from the abdominal cavity, but it may be reasonable to perform when a patient does not respond to usual therapy and the risk of surgery is prohibitive."

The etiology of ascites in our patient was probably multifactorial, secondary to malnutrition as well as right-sided congestive heart failure due to severe tricuspid regurgitation. She did not have typical cirrhotic ascites, but did have ascites of long-standing duration. While a definite etiology of peritonitis was not identified in our patient, clinically she had secondary bacterial peritonitis. Despite 14 days of parenteral antibiotics, the patient deteriorated, and the ascitic fluid white blood cell count rose from 3,700 to 46,530. She clinically improved only when continuous perioneal lavage with a gentamicin-containing solution was begun in addition to parenteral antibiotics. Peritoneal lavage is not routinely recommended for drainage of purulence from the abdominal cavity, but it may be reasonable to perform when a patient does not respond to usual therapy and the risk of surgery is prohibitive.

Summary

A patient with secondary bacterial peritonitis was successfully treated with parenteral antibiotics and peritoneal lavage with an antibiotic-containing solution. Secondary bacterial peritonitis is characterized by both a significantly higher ascitic fluid leukocyte count and higher mortality than spontaneous bacterial peritonitis. Surgical drainage is usually required for successful management of secondary peritonitis.

Acknowledgements

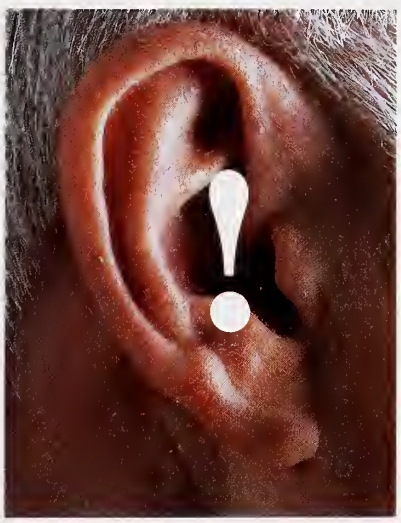
The authors wish to thank Mrs. Alma Bussey and Mrs. Charlotte Betters for manuscript preparation.

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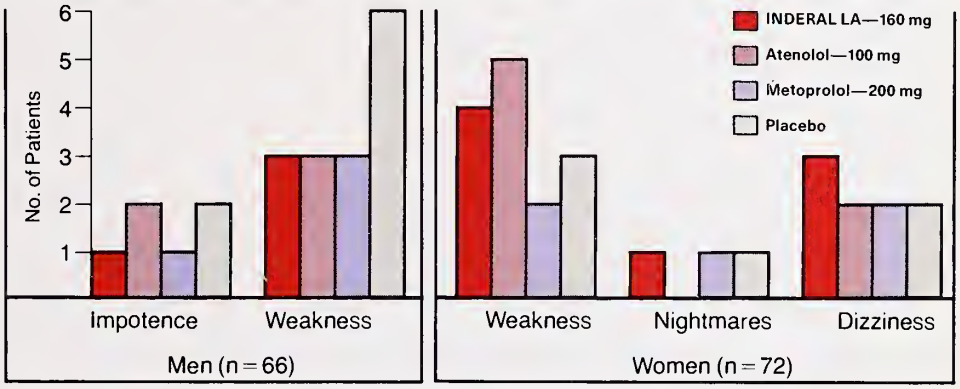
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Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block, hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia; gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia.

Hematologic: Leukopenia, agranulocytosis; thrombocytopenia; aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura; photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever; respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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Pediatric Cardiac Rehabilitation: Exercise Training and Prescription

Ian Balfour, M.D., Ami Drimmer, Soraya Nouri, M.D.

"Data from other pediatric programs have shown that rehabilitation is associated with an improvement in patient's self-image, feelings of being more in control of their lives and bodies, and improved academic performance."

THE REHABILITATION PROGRAM at Cardinal Glennon's Children Hospital (CGCH) was designed for the following groups of children: 1) Children with cardiac disease who are poorly conditioned because of inappropriate restrictions being placed on their level of activity; (These are children with relatively benign lesions, such as small VSDs, mitral valve prolapse) 2) Children who have more severe conditions, such as cardiomyopathy, or who have had aortic valve replacement, or Fontan's operation; 3) Children with normal hearts at increased risk of developing cardiovascular disease (hypertensive subjects, patients with hyperlipoproteinemia); and 4) Children with other than cardiovascular disease, whose disease or quality of life might be improved with exercise (children with diabetes mellitus, cystic fibrosis,[1] or bronchial asthma[2]).

We exclude children with the following conditions from exercise rehabilitation: 1) severe aortic or pulmonary stenosis; 2) less than 6 weeks post open heart surgery; 3) arrhythmia aggravated by exercise; 4) Eisenmenger's syndrome; 5) hemoglobin $\geq$17 gms %; 6) uncontrolled hypertension; 7) uncontrolled congestive heart failure (NYHA Class IV); 8) acute inflammatory myocardial disease; 9) obstructive airway disease not adequately controlled by medication; 10) any condition that would prohibit the patient from exercising safely, e.g., orthopedic deformity; and 11) patients with hypertrophic obstructive cardiomyopathy.

Some patients will require very close monitoring, e.g., telemetry while undergoing exercise training. Examples of such patients are those with exercise-induced ischemia, or more than mild aortic stenosis, or patients with cystic fibrosis who might require ear oximetry while exercising.

The exercise prescription should be graded with periodic increases in its intensity. The exercise prescription should be designed so as to be suitable for the age, abilities, personality, and cardiac or other medical condition of a particular child. At the beginning of the program, the children (particularly adolescents) are encouraged to set attainable goals. Typical goals are weight loss or improved endurance so as to "have more energy." The physician and exercise therapists are careful not to push these children to

From the Department of Pediatrics, St. Louis University Medical, 1465 S. Grand Blvd., St. Louis, MO 63104. Send reprint requests to Dr. Balfour.

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achieve unrealistic goals, but rather to encourage each child to attain his or her optimal level of functioning, within the boundaries set by that child's cardiac lesion or other medical condition. In the case of older children (adolescents), it may be necessary to educate them to restrict themselves to participation in safer exercises and avoid activities such as weightlifting and other isometric exercises. The exercise prescription should be a combination of exercises that will improve cardiovascular fitness (endurance), muscular strength, and flexibility. A baseline graded exercise test is done prior to initiating exercise therapy. During this test (treadmill or bicycle ergometer), the patient's maximal (Max VO_2) or peak oxygen consumption and anaerobic threshold are determined, and his or her EKG is monitored for dysrhythmias or evidence of ischemia. After determining the patient's peak VO_2 an activity can be prescribed which will place that patient at his or her training level. To achieve an optimal training effect, the patient should exercise at 60% to 70% peak VO_2 or at 70% to 85% of maximal heart rate.[3] A training effect may occur at slower heart rates but not as quickly or to the same degree. Some patients need to be started at slower heart rates because of poor conditioning or because of the severity of their disease. Walking briskly, pedalling a bicycle ergometer, jogging, or rowing would be appropriate forms of exercise to improve conditioning, providing the training threshold is achieved.

"To improve strength, training should be carried out at 60-65% maximal muscle contraction for optimal results."

To improve strength, training should be carried out at 60 to 65% of maximal muscle contraction for optimal results. Purely isometric exercises may place an excessive load on the heart by increasing afterload. To avoid this, we start our patients lifting light weights with many repetitions so that the weight training is a combination of dynamic and isometric exercise but is predominantly dynamic. As the patient's strength improves, the amount of weight is increased. Flexibility is improved by stretching exercises, which precede and follow each exercise session as part of the warm up and cool down phases of the exercise session.

The duration of each exercise session should allow enough time for proper warm up (5-10 minutes), the main conditioning phase (15-30 minutes) at an intensity that will exceed the threshold necessary to produce optimal training effect, and 5-10 minutes of cool down. The total time per session should be 35-50 minutes. The frequency of the session is determined by the objective of the program. If the objective is to condition the individual, then there should be 4-5 sessions per week. To maintain an achieved conditioned state, 2-3 sessions per week should be adequate.[3] The frequency will also depend on the individual's initial state of physical fitness. A very poorly conditioned subject may need to be started more slowly. The program at CGCH is 6 months long. In the first 3 months, the participants attend three sessions per week; in the 4th and 5th months, they attend twice weekly; and in the 6th month, once per week. The patients are encouraged to exercise on additional days at home so that exercise is done a total of three or four times per week. On completing the 6-month program, the patients are started either on a home-based exercise program, or on a maintenance program at our gym. All patients are re-evaluated after 6 months to ensure that they have maintained or improved

Table I

	Patient A			Patient B		
Rest	*T1*	*T2*	*%*	*T1*	*T2*	*%*
MVO_2	12800	11625	10	9720	8927	8
Submax MVO_2	26230	22352	15	26010	21442	18
Peak HR	154	171	11	170	180	6
Peak VO_2	28.7	30.5	6	25.9	32.5	25
GXT Time	7.75	9.28	23	8.00	10.6	32

Legend: T_1 pre-tralning test; T_2 post-training test; % percent change; RestMOV_2-product of resting systolic blood pressure and resting heart rate (an indicator of myocardial oxygen consumption); Submax MVO_2 Myocardial oxygen consumption at similar submaximal work load; Peak HR highest heart rate achieved during the exercise test (in beats per minute); Peak VO_2 highest oxygen consumption achieved during the exercise test (in ml/kg body weight/minute); GXT (Graded Exercise Test) time in minutes on treadmill exercise test (Bruce protocol).

their level of fitness. When the patients are re-evaluated, one of our main interests is in changes in their cardiorespiratory function. In order to assess changes in cardiovascular efficiency, we look at resting and submaximal MVO_2 (Myocardial O_2 Consumption Index Double Product). For total work capacity, we measure VO_2 max (ml/kg.min) and total exercise duration time. To illustrate this point, the results of two of our patients who were tested prior to joining the program and again after 3 months of training are displayed in Table I.

From these data, one can see that both patients improved their cardiovascular efficiency and total work capacity. It is important to document these physiologic improvements and share them with the patient so that he/she will understand the benefits obtained from participation in the program.

A program of education is undertaken concurrently with the exercise program. Parents and children are taught about basic cardiac physiology such as the role of the heart in exercise, the benefits of exercise to the heart and the relationship of diet, smoking, and other risk factors to cardiovascular disease.

Rehabilitation should address both the physical and psychologic needs of the patient. A psychologist participates in the program and is available for group and individual counselling of patients and their parents. The patients and parents are taught biofeedback techniques to reduce stress. The older children (teenagers) are counselled about alcohol and drug abuse. A psychologic profile is obtained on each child at the start and completion of the program by means of detailed questionnaires which are sent to patient's parents and teachers. The relationship between parents and the patient and siblings is assessed. Teachers are asked to evaluate the patient's academic performance, participation in sports, and interaction with other children at school. The information obtained is used for counselling families. Follow-up questionnaires are sent at the end of the program to assess changes effected by rehabilitation. Data from other pediatric programs have shown that rehabilitation is associated with an improvement in the patient's self-image, feelings of being more in control of their lives and bodies, and improved academic performance.[4]

Rehabilitation of adults with coronary disease has been proven to be beneficial.[5] Rehabilitation through a combination of cardiac and extracardiac changes can improve exercise performance and the patient's sense of well being. Comparable programs for young people are needed because of the potentially longer lifespan of the child with cardiac disease. The question therefore is not whether these programs should be created, but how to structure them so as to produce safe, effective, and long lasting improvements in physical and mental health and quality of life.

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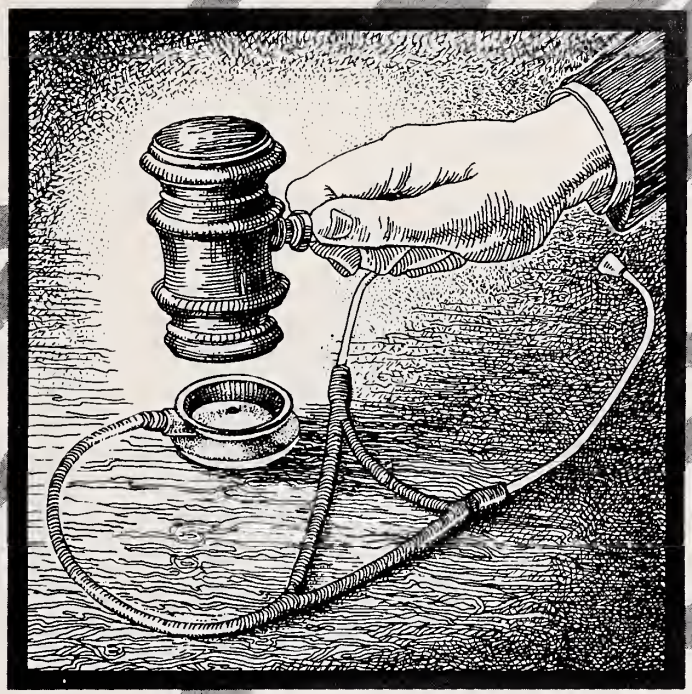
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The Bare Facts About Going Naked

Robert P. Constantine, Jr., Scott E. Tinnon

"... before you put on your 'birthday suit' or make any significant transfer of assets, you should seek professional advice from your lawyer, accountant . . . (etc)."

How many times have you heard one of your colleagues say or thought to yourself, "the #!@!*# with it all . . . I'll just go naked, cancel my insurance coverage, put everything in my wife (or husband's) name and they can just come and get me — I've had it!" The bare fact is that before you "denude yourself" of all of your assets and cancel your insurance coverage there are a few things you should consider.

Legally speaking, there is no requirement under Georgia law that a physician have malpractice insurance coverage in order to practice medicine in the state. However, as a practical matter, most physicians are required to have or do maintain professional liability insurance coverage for a variety of reasons. Most hospitals require a certain minimum level of insurance coverage as a condition for extension of hospital privileges. Most HMOs and PPOs require medical malpractice coverage as a condition of being designated as a panel physician. Many partnership agreements or other practice arrangements require insurance coverage; and, generally speaking, it is a prudent business practice to maintain an adequate level of liability insurance coverage.

Mr. Constantine and Mr. Tinnon are partners in the law firm of Constantine & Tinnon in Atlanta, which specializes in insurance and health law. Mr. Constantine is a former Deputy Comptroller General and Chief Deputy Insurance Commissioner of the State of Georgia and his firm represents MAG Mutual Insurance Company, Georgia Health Network, the Georgia Society of Anesthesiologists, and various other medically-related groups.

MAG's General Counsel, Richard Greene, solicited this article to address the questions recently received on this subject.

The question then remains that, even if you have adequate insurance coverage, what factors should you consider before you decide to transfer any of your assets to your wife, to your husband, or to some other family member in order to avoid exposing all of your family assets to a risk of loss in the event that a lawsuit is filed against you.

The primary legal restriction under Georgia law regarding the placing of assets in the name of another or otherwise conveying assets to another which could be used for the benefit of creditors is that such a conveyance will be set aside if it can be proven that it has been made in an attempt to defraud creditors.[1] There are other statutes which provide specific rules regarding the conveyance of various types of assets, for example, the one relating to transfers of title to automobiles.[2] Similarly, there are various rules that apply under the Federal Bankruptcy Laws in the event of the ultimate bankruptcy of the individual. However, for the purpose of this article, our discussion is limited to Georgia's general statute on "fraudulent conveyances."

The basic Georgia statute on "fraudulent conveyances" is O.C.G.A. §18-2-22. This Code section sets forth three general types of conveyances which are deemed to be fraudulent and null and void as against creditors and others. Two of them are relevant to our discussion here.[3] They are:

(1) Conveyances made by a debtor with an intent to defraud, hinder, or delay his creditors.[4]

(2) Voluntary conveyances made by an insolvent debtor not for adequate consideration.[5]

In determining whether a conveyance falls within one of these two categories and can be set aside by creditors, the courts consider various factors. Thus, before you decide to transfer any of your assets to your spouse or to another family member, here are some of the things you should consider:

(1) *The prohibition against "fraudulent conveyances" applies to torts as well as to contract actions.*[6]

(2) *If you decide to convey property after an alleged incident of malpractice has occurred, you are probably too late.* The Georgia Supreme Court has held that an injured person may proceed against a grantor causing harm to such person (ie — a "tortfeasor") and the tortfeasor's grantee to set aside a conveyance of property, as null and void, when the property is conveyed *after* a tort has been committed.[7] However, even if a conveyance is made prior to the commission of a tort, it is arguably possible that a court might hold that such a conveyance is fraudulent. The Georgia Supreme Court has held that a conveyance may be deemed to be fraudulent as against *future creditors* if it can be proven that it has been made "with an intent to defraud" such future creditors.[8] Thus, even though we could find no Georgia cases dealing specifically with the question of whether this principle regarding attempts to defraud future creditors should be extended to cover debts arising out of torts committed by a tortfeasor/debtor *after* a conveyance, it is arguably possible that the rule could be extended to reach such situations if there is overwhelming evidence of an intent by the tortfeasor/debtor to defraud *future creditors* and the resulting damage to claimants is particularly unjust.

(3) *The prohibition against fraudulent conveyances may apply to assets purchased by you in the name of another, such as a wife, child, or corporation in which you have an interest.*[9]

(4) *Conveyances between relatives and spouses are closely scrutinized and slight evidence of fraud between them may be sufficient to set them aside.*[10] A mere showing of a close relationship is not enough, except in the case of a conveyance between spouses.[11] The plaintiff generally must make a showing of additional circumstances indicating fraud, so-called "badges of fraud," in order to set a conveyance aside.[12] However, if the conveyance is made to a spouse, fraud is presumed and it is up to the transferor and the spouse to show that the transaction as a whole has been made in good faith and without an intention to defraud.[13]

(5) *Conveyances to innocent purchasers for value and without notice of or without a reasonable suspicion of an intent to defraud, may not be set aside.*[14] Indeed, conveyances to spouses may sometimes not be set aside if a jury concludes that a transfer has been made for "valuable consideration," such as in payment of an existing debt,[15] or if a jury concludes that a creditor knew of the transfer of property or otherwise did not rely on the credit of the spouse or on the property to secure the loan.[16] Again, we are aware of no Georgia cases specifically applying this concept to debts arising as the result of a tort, but presumably the same line of reasoning could apply to a claimant who had full knowledge of a transfer of assets at the time a tort was committed and, thus, theoretically did not rely on such assets to satisfy any claim he might have against the tortfeasor.[17]

(6) *Finally, as one divorce lawyer so aptly put it, "Anybody who transfers all of his assets to his spouse, better be sure that he has a good marriage."* Consider, for example, the case of the unfortunate Mr. Carden. Mr. Carden lent his son some money to start a business and cosigned a note for his son. When the son's business began to falter, Mr. Carden transferred his real property to his wife in an attempt to "denude himself" of record title and keep the real estate out of the reach of his son's creditors. He then argued that he had no assets and tried to get his son's creditors to accept the inventory of the

"If you decide to convey property after an alleged incident of malpractice has occurred, you are probably too late."

business in full settlement of the debt. The creditors, however, were not moved and he ultimately paid his son's debts in full. Then, you guessed it, his wife sued him for divorce. In the divorce action, Mr. Carden claimed that the real estate was being held by his wife in a "resulting trust" for his benefit and should be returned to him. The Court ruled, however, that since there was no question that Mr. Carden transferred the property to his wife to defraud his creditors they would not allow him to submit the issue of the resulting trust to the jury."[18]

Regardless of the reasons you may have for wanting to consider a transfer of your assets to another, one thing should be clear; and, that is, that the law in this area is somewhat unclear and tends to change based upon the facts of each particular case and of the perceived equities or inequities involved. There may also be serious tax consequences as a result of any decision you might reach and other specific statutes might apply. Plus, as mentioned above, the results to you in the event of a divorce might be disastrous.

This article is not intended to advise you as to what you should do, but rather to let you know a few things you might want to consider before making a decision to transfer assets to another. It goes without saying that before you put on your "birthday suit" or make any significant transfer of assets, you should seek professional advice from your lawyer, accountant, financial planner, or other advisor with regard to your specific situation.

Notes

1. O.C.G.A. §18-2-22.
2. O.C.G.A. §40-3-31(d).
3. The first general category of fraudulent conveyances is assignments or transfers of property by an insolvent debtor to another in trust for the benefit of creditors. It is codified at O.C.G.A. §18-2-22(1).
4. O.C.G.A. §18-2-22(2).
5. O.C.G.A. §18-2-22(3).
6. *Foremost Dairies, Inc. v. Kelley,* 51 Ga. App. 722 (1935); *see also, Downs v. Powell,* 215 Ga. 62 (1959).
7. *Downs v. Powell, supra.*
8. *Jones v. J.S.H. Company,* 199 Ga. 755 (1945).
9. *See Harper v. Atlanta Milling,* 203 Ga. 608 (1948); see also S.T. & W.A. Dewees Co. v. Paul B. Carter & Co., 190 Ga. 68 (1940).
10. *See McLendon v. Reynold's Grocery, Co.,* 160 Ga. 763 (1925); *Scruggs v. Blackshear Mfg. Co.,* 45 Ga. App. 855 (1932); *see also Hilburn v. Hightower,* 178 Ga. 534 (1934), relating to "near relatives" such as "brothers-in-law."
11. *Webb-Crawford Co. v. Bozeman,* 178 Ga. 328 (1934).
12. "Badges of fraud" are those circumstances evincing an intent to defraud or delay creditors; they include inadequate consideration (value received by debtor less than value given), conveyances while lawsuit pending, grantor's retention of physical possession of the property, relationship of the parties and the existence of reasonable grounds for suspicion by the grantee. For a detailed discussion of these "badges of fraud," see "Developments in Georgia Law: Debtor — Creditor Rights," 12 *Ga. L. Rev.* 814, 1027-1032 (1978).
13. *Moore v. Loganville Mercantile Co.,* 184 Ga. 351 (1937); *see also Spiegel v. Ross,* 188 F. Supp. 812 (N.D. Ga. 1960).
14. *See* O.C.G.A. §18-2-22(2); *Burkhalter v. Glennville Bank,* 184 Ga. 147 (1937).
15. *Brown v. Citizens & Southern National Bank,* 253 Ga. 119 (1948); *see also Stanton v. Adams,* 180 Ga. 142 (1935).
16. *Peachtree Bank & Trust Co. v. Atha* 151 Ga. App. 565 (1979); *see also Brown v. Citizens & Southern National Bank, supra.*
17. For more detailed discussions of possible ways in which physicians might reduce their liability exposure by entering into contracts with their patients: *see* Ackerman, "Medical Malpractice: A Time for More Talk and Less Rhetoric," 37 *Mercer L. J.* 725, at pp. 749-753; O'Connell, "No-Fault Insurance for Injuries Arising from Medical Treatment: A Proposal for Elective Coverage," 24 *Emory L. J.* 21 (1975); Epstein, "Medical Malpractice: The Case for Contract," 1976 *Am. Bar Found. Research J.* 87; and O'Connell, "Elective No-Fault by Contract — With or Without an Enabling Statute," 1975 *U. Ill. L. F.* 59.
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OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93; 588-96.

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Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS:
Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.
Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.
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Revised, April 1982. 5685

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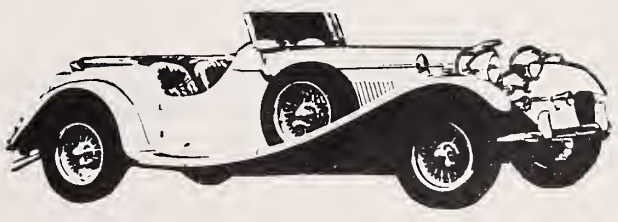
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Tumor Registries: Measureable Advantages

Thomas W. Phillips, M.D.

"With the information gathered in the registry, audits and reviews can give information which will indicate the quality of care received by the cancer patients in a given hospital."

- *Approximately 20% (403,395) of all deaths per year in the United States are due to cancer. Cancer has become the second most common cause of death in this country.*
- *Lung cancer caused five deaths per 100,000 population in 1930. In 1980, lung cancer caused more than 70 deaths per 100,000.*
- *Almost 10,000 Georgians will die of a malignancy this year.*
- *Death rates for all sites are 216.9 per 100,000 population in the United States and 275 per 100,000 in Scotland.*
- *The 5-year survival percentages for women with breast cancer are 74% for whites and 62% for blacks.*

ARE THESE facts important to you? How are these data obtained? What are the cancer statistics for your hospital? How do your hospital's statistics compare to national statistics for cancer diagnosis, treatment, and end results?

If your hospital does not have a cancer program including a cancer committee, a tumor registry, and cancer conference you probably cannot answer these questions.

One of the most important parts of a hospital cancer program is the tumor registry. With the information gathered in the registry, audits and reviews can give information which will indicate the quality of care received by the cancer patients in a given hospital. This allows the physicians to evaluate the effectiveness of treatment given in their institution. If weaknesses or strengths are noted when compared to national statistics, causes should be sought out and corrected or amplified.

The cancer patient benefits from the tumor registry by the follow-up procedure. Since cancer patients have a risk of recurrence after treatment and an increased risk of developing a second primary tumor, follow up is obviously quite important.

Twenty-seven states have centralized state tumor registries. These central registries gather information from each voluntarily participating hospital registry for compilation and analysis. This type of information is used to study the epidemiology of cancer.

Georgia has a central tumor registry which is operated by the Medical Association of Georgia. The Georgia Central Registry has not been as active as it should be for various reasons. But there is a revitalization of the Central Registry underway. Hopefully, all hospitals in the state that care for cancer patients will join the new central registry in the near future.

A preliminary proposal for Georgia would divide the state into three major regions based on population. These

Dr. Phillips is Director of Radiation Oncology, Crawford W. Long Hospital. Send reprint requests to him at 25 Prescott St., Atlanta, GA 30365.

This article was sponsored by the Georgia Division of the American Cancer Society.

regions would be Northern, Southeastern, and Southwestern. There would be a regional tumor registry established in major cities which would gather tumor registry data from individual hospitals. This information would be compiled and forwarded to the State Central Registry for analysis.

The primary purpose of an individual hospital's tumor registry is end-result analysis. The physicians in a given hospital can evaluate their success rates for any given malignancy and compare their results to national statistics. The Regional Registries could also look at end results, but would have as a main purpose incidence reporting. Incidence reporting means tabulating specific cancers and expressing them on a per population basis (usually per 100,000). This type of information is important in detecting unusually high incidence of cancers which may be related to industrial or environmental factors. The Central State Registry would almost exclusively be concerned with incidence reporting.

Everyone in the state would benefit by the revitalization of a Central Registry. The patients benefit by end-result analysis (quality assurance). The physicians benefit in many ways, including end-result analysis to assess effectiveness of treatment; demographic data for patient referral patterns; and follow-up information on specific patients. The general population benefits by incidence reports so social, environmental, or industrial hazards can be eliminated.

For additional information, contact the American Cancer Society.



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Ayers, Marva L., Muscogee — I&R — FP
The Medical Center, P.O. Box 951, Columbus 31994

Branch, Roger G., Jr., Muscogee — I&R — FP
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710 Center St., Columbus 31902

Choi, Sung Koo, Gordon — Act — AN
P.O. Box 2106, Calhoun 30701

Collier, Millard J., Jr., M.A.A. — I&R — FP
3832 King Henry Rd., Atlanta 30331

Ellison, Thomas W., Muscogee — Service — PD
5425 Kessington Dr., Columbus 31907

Flandry, Frederick C., Muscogee — I&R — FP
The Medical Center, P.O. Box 951, Columbus 31994

Foster, Gregory A., Muscogee — I&R — FP
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Glisson, John V., Stevens-Rabun — Act — PD
208 Fernside Dr., Toccoa 30577

Golding, Eugene M., Jr., M.A.A. — Student
1716 Terrell Mill Rd., B-17, Marietta 30067

Gonzalez, Raul A., Floyd-Polk-Chattooga — Act (N-2) — IM
1825 Martha Berry Blvd., Rome 30161

Gowitt, Gerald T., M.A.A., I&R — PTH
510 Indian Mill Ct., Alpharetta 30201

Graham, James L., Muscogee, I&R — FP
The Medical Center, P.O. Box 951, Columbus 31994

Harris, Glenn D., M.A.A., I&R — PD
426 Linden Blvd., Brooklyn 11203

Jenkins, Jeffrey S., Muscogee, I&R — FP
The Medical Center, P.O. Box 951, Columbus 31994

Kaufmann, Robert S., M.A.A. — I&R — IM
300 W. Peachtree St., #9-G, Atlanta 30308

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3280 Howell Mill Rd., #303, Atlanta 30327

Leonard, Tommy, Jr., Muscogee — Service — PD
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Lue, John R., M.A.A. — Student
763 Hill St., Atlanta 30315

MacLeod, Douglas R., Muscogee — COS — PD
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McDonald, Linda T., M.A.A. — I&R — OBG
1175 Reilly Lane, Clarkston 30021

McGhee, James, M.A.A. — Student
757 #3 Houston Mill Rd., Atlanta 30329

McLarnon, Michael C., Whitfield-Murray — Act (N-2) — P
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Moon, Robert H., Muscogee — I&R — FP
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Nixon, Kathleen T., M.A.A. — Student
1486 Oakridge Cir., Decatur 30033

Pierce, David M., Muscogee — I&R — FP
The Medical Center, P.O. Box 951, Columbus 31994

Renfroe, Philip R., Muscogee — I&R — FP
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PERSONALS

First District

Ray Webb, M.D., a general practitioner in Springfield, retired after 30 years of medical service to Effingham County. He was honored at a banquet hosted by the Hospital Authority there.

Sixth District

Internist **Charles D. Hitson, M.D.,** has recently joined the AMI Griffin-Spalding Hospital medical staff. A graduate of the Medical College of Georgia, Dr. Hitson completed his residency and internship at Memorial Medical Center in Savannah.

Seventh District

Jeffrey Peller, M.D., has been elected to fellowship in the American Rheumatism Association. Dr. Peller is a rheumatologist at the Harbin Clinic in Rome.

Douglas Laipple, M.D., of Rome, has joined the staff of Harbin Clinic. Board certified in both psychiatry and neurology, Dr. Laipple was previously with the Wright State University of Medicine and the United States Regional Medical Center at Wright-Patterson Air Force Base, Ohio, where he served as director of the psychiatry-residency program.

Eighth District

Ira M. Weissman, M.D., a pediatrician, and **Evelyn L. Weissman, M.D.,** a surgeon, recently opened their practices in St. Mary's. Dr. Evelyn Weissman is a graduate of the Medical College of Pennsylvania where she did her residency in general surgery, and served as chief resident in her final year. Dr. Ira Weissman served as head of pediatrics at the Southern Home for Children in Philadelphia and was on the medical staff of the hospital of the Medical College of Pennsylvania.

Tenth District

William Barfield, Sr., M.D., of Augusta, was elected president of the Georgia Obstetrical and Gynecological Society for 1986. Dr. Barfield is assistant clinical professor in the department of obstetrics and gynecology at the Medical College of Georgia.

Kenna S. Given, M.D., of Augusta, a professor and chief of the Division of Plastic Surgery at the Medical College of Georgia, was recently nominated to the Board of Directors of the Plastic Surgery Educational Foundation.

DEATHS

Gerald Bugg Creagh, M.D., of Augusta, died after retiring from two distinguished careers in medicine. Dr. Creagh first retired in 1960 after serving for 30 years in the U.S. Navy. At various times, he served as chief of surgery at the U.S. Naval Academy, chief of medical services in several naval hospitals, as commanding officer of the naval hospital at Camp Pendleton, California, and as medical officer on various ships. Dr. Creagh retired again in 1973 after a distinguished second career as director of the Northeast Georgia Public Health Department. He was a Fellow in the American College of Surgeons.

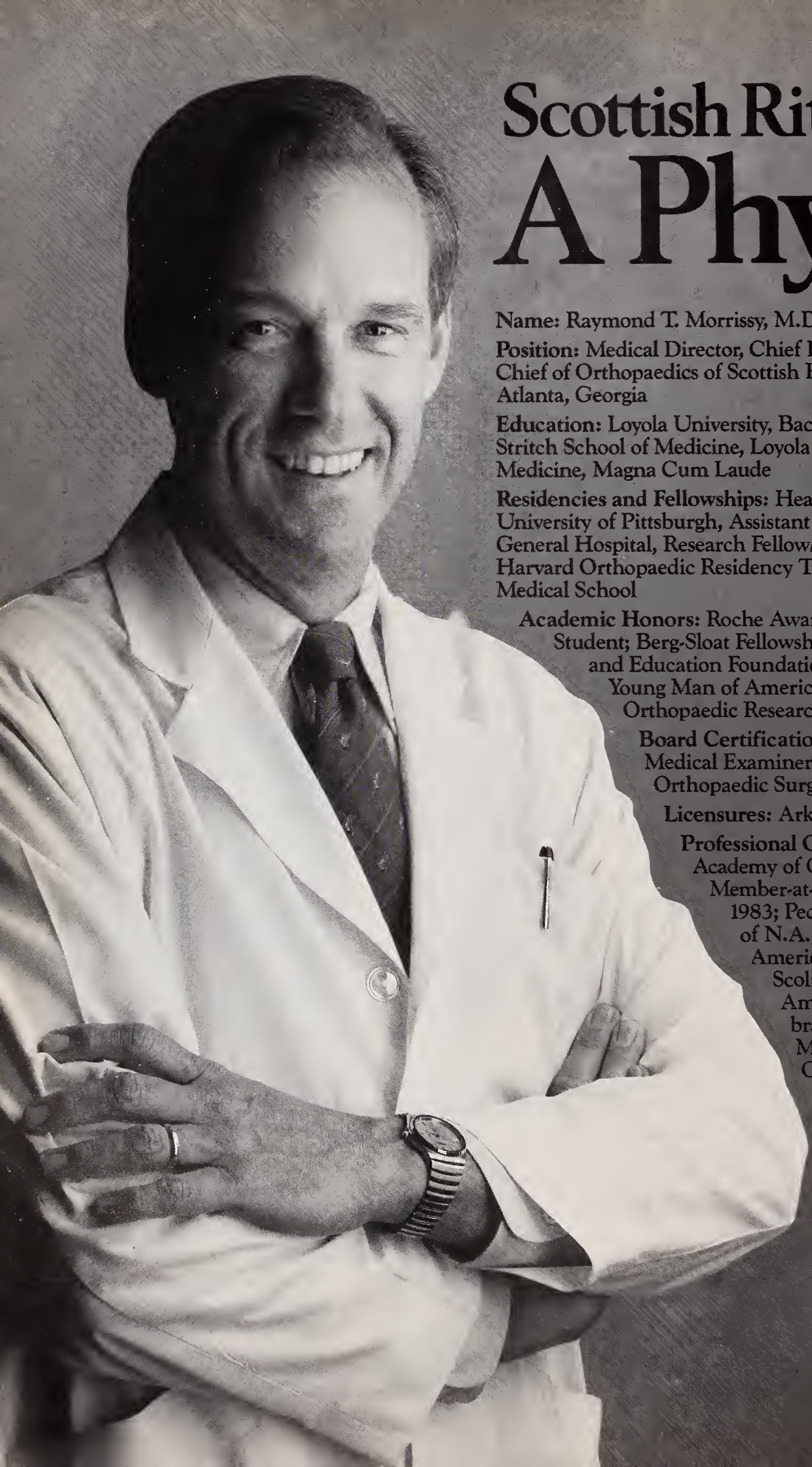
Dan B. Kahle, M.D., an Atlanta obstetrician, died of a heart attack at the age of 62. Dr. Kahle served in private practice in obstetrics and gynecology in Atlanta for 30 years. He graduated from the Indiana University School of Medicine, moved to Atlanta in 1956, and later served on the staff of Northside Hospital. Surviving are his wife, two daughters, his mothers, and a sister.



By leaving even the smallest legacy to the American Cancer Society in your will, you can leave a loving and lasting impression on life. And giving life is the greatest way of leaving your mark on it.

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Scottish Rite Profile:
A Physicia

Name: Raymond T. Morrissy, M.D.

Position: Medical Director, Chief Executive Officer, Chief of Orthopaedics of Scottish Rite Children's Hospital, Atlanta, Georgia

Education: Loyola University, Bachelor of Science in Biology; Stritch School of Medicine, Loyola University, Doctor of Medicine, Magna Cum Laude

Residencies and Fellowships: Health Center Hospitals, University of Pittsburgh, Assistant Resident; Massachusetts General Hospital, Research Fellow/Orthopaedics; Combined Harvard Orthopaedic Residency Training Program, Harvard Medical School

Academic Honors: Roche Award, Outstanding Medical Student; Berg-Sloat Fellowship, Orthopaedic Research and Education Foundation; Jaycee's "Outstanding Young Man of America"; Kappa Delta Award for Orthopaedic Research

Board Certification: National Board of Medical Examiners; American Board of Orthopaedic Surgeons, Diplomate

Licensures: Arkansas, Georgia

Professional Organizations: American Academy of Orthopaedic Surgeons, Member-at-Large, Board of Directors 1983; Pediatric Orthopaedic Society of N.A., Board of Directors; American Academy of Pediatrics; Scoliosis Research Society; American Academy for Cerebral Palsy and Developmental Medicine; Inter Urban Orthopaedic Society;

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n's Physician

Russell A. Hibbs Society; Georgia Medical Association; Atlanta Medical Association

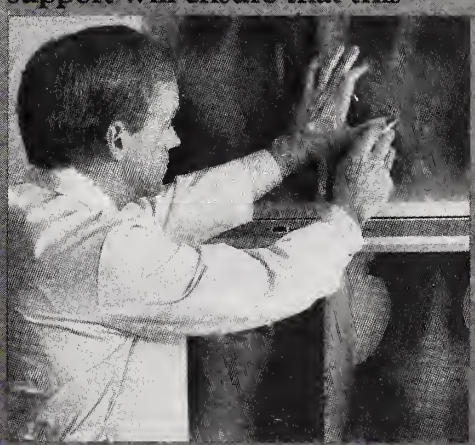
Current Research Grant From: National Institute of Health: "Hematogenous Osteomyelitis Etiology and Treatment"

Scientific Publications and Presentations: Author/Co-Author of twenty-nine published articles; five articles and book chapters awaiting publication. Numerous scientific and educational presentations. National and international guest lecturer.

On Orthopaedics at Scottish Rite: "Currently the Orthopaedic Department at Scottish Rite has one of the strongest programs in the country for treating infants, children and adolescents both on an in-patient and an out-patient basis. In this department, we only do what we can do well and we feel we should do it better tomorrow. It's our good fortune to have the institutional support that provides us with the very best equipment and personnel. Plans for continued expansion and improvement over the next five years will ensure that Scottish Rite remains a leader in the pediatric orthopaedic field."

On the Scottish Rite Orthopaedic Staff: "In addition to several general orthopaedic surgeons who contribute their special areas of expertise, four full-time pediatric orthopaedic surgeons currently staff the department. These surgeons have devoted their entire practice and experience to caring for infants, children and adolescents. Within the department we are beginning to subspecialize, for which, in certain areas, we are receiving national recognition for both research and care. We also have available to us all types of subspecialty care ranging from anesthesia to plastic surgery to hand surgery.

"The combination of medical skills and superb institutional support will ensure that this



remains one of the finest centers for the care of orthopaedic problems in children in the country."

On being Director of Orthopaedics: "The growth in this institution and this department over the last few years has filled us all with pride and excitement. As is often the case, the achievements of the present are based on the foundations of the past. Certainly my predecessors, especially Dr. Wood Lovell, set the machinery in motion that has encouraged progress and change. It is this legacy that has made it possible for us to maintain and enhance our position of excellence.

"The challenge today is to have the foresight to choose the right course for the future in a specialty that is advancing at a pace few could envision five years ago. To do this requires individual dedication on the part of our staff, a strong institutional commitment and on-going community support."

On the Future of Orthopaedics: "Orthopaedics, more than any other surgical specialty, is exploding with new technologies and new information. The best evidence of this is in the necessary subspecialization that is taking place to assimilate all the advances and practice them skillfully.

"Parents are more demanding of the care their children receive than ever before. They want the best and the latest for their children. In turn, we must develop our special areas of expertise to a higher degree. Another factor is that care of children is switching more and more to the outpatient arena. I think the practice of pediatric orthopaedics will become more and more a part of institutions in order to facilitate delivery of care and eliminate its fragmentation. Ultimately, pediatric orthopaedics is limited only by the development of technology and knowledge and the development of our skills to apply these."

SCOTTISH RITE CHILDREN'S HOSPITAL

1001 Johnson Ferry Road
Atlanta, Georgia 30363
404-256-5252

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> Soter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. N Engl J Med 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

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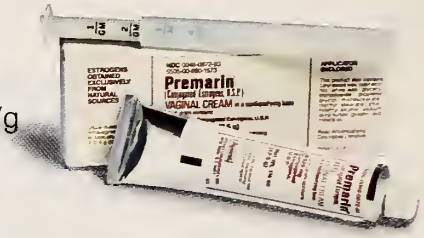
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1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.
2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.
The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATIDN:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.
2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605 **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985; 67: 496-499. **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983,1:1;41-52. **5.** Barnes RB, Roy S, Lobo RA: Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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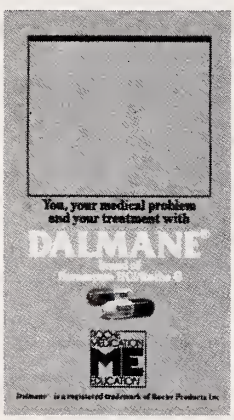
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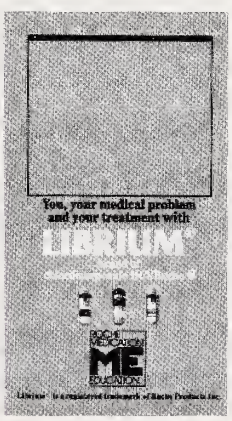
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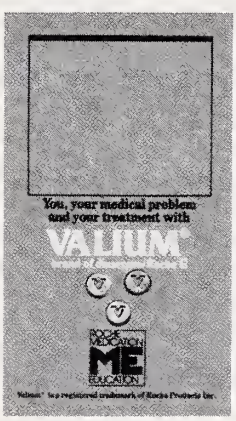
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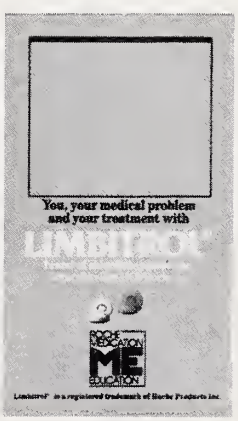
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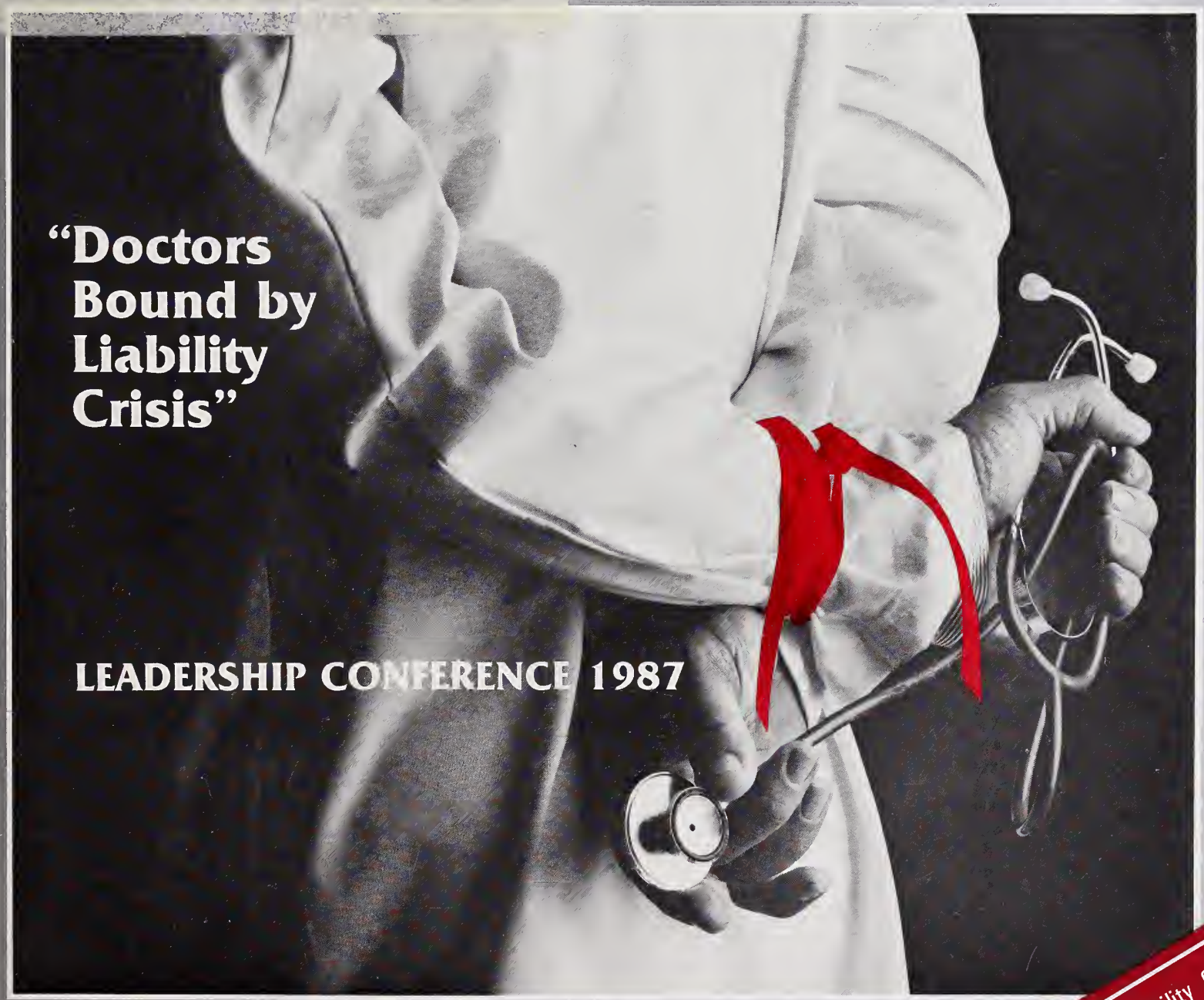
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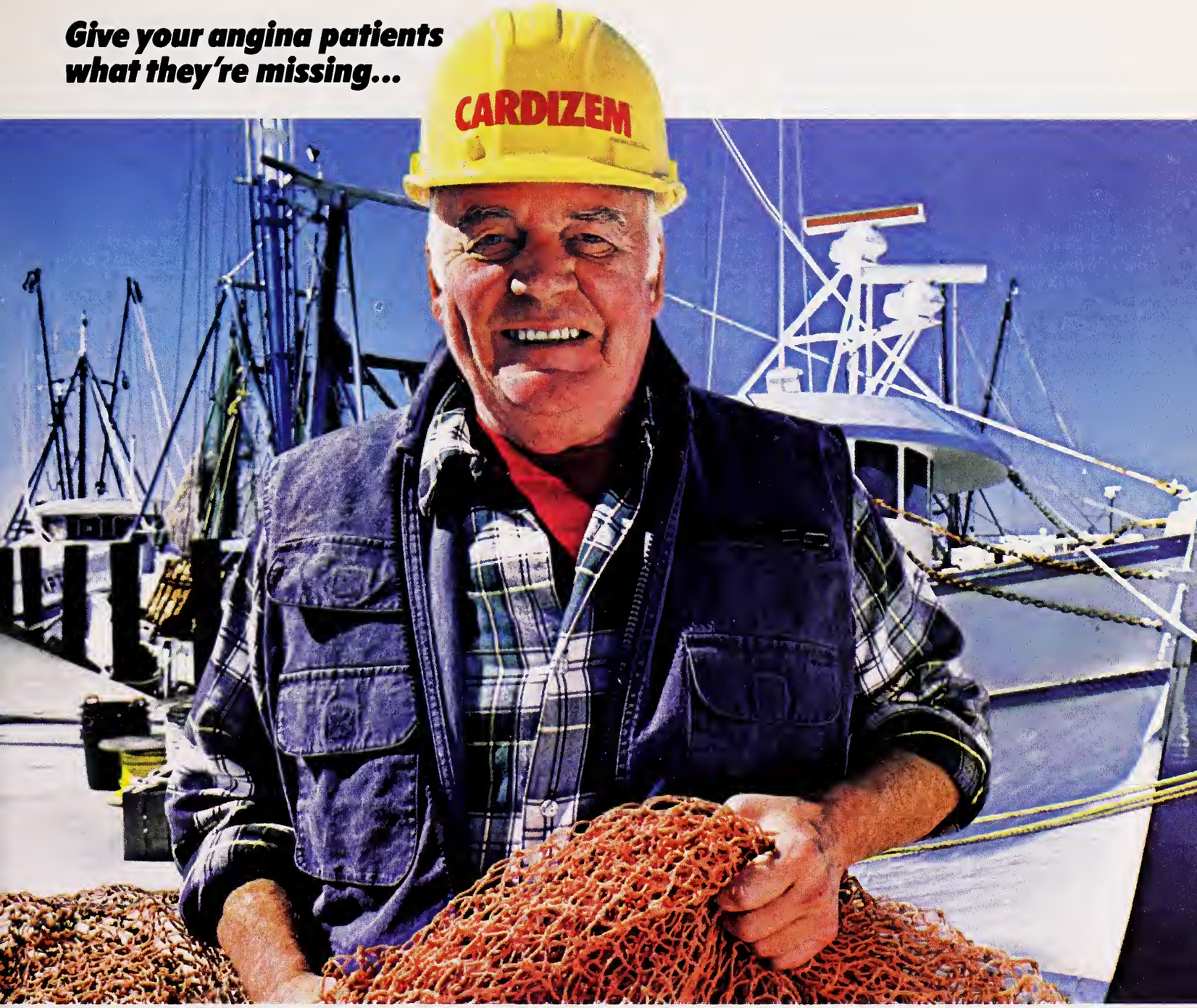
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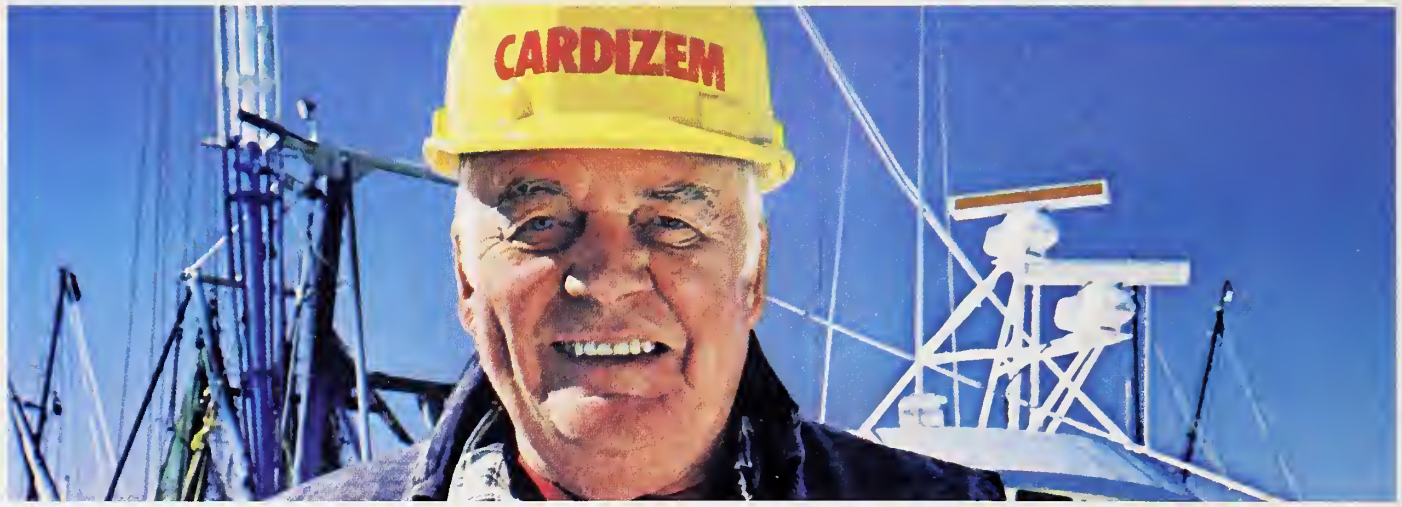
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diltiazem HCl/Marion

- ***Antianginal action includes dilatation of coronary arteries, a decrease in vascular resistance/afterload, and a reduction in heart rate***
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- ***Compatible with other antianginals[2,3]****
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****See Warnings and Precautions.***

Please see brief summary of prescribing information on the next page



CARDIZEM® FEW SIDE EFFECTS IN ANTIANGINAL THERAPY

diltiazem HCl/Marion

60 mg tid or qid

Brief Summary
Professional Use Information

CARDIZEM®
(diltiazem HCl) 30 mg and 60 mg Tablets

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. ***Cardiac Conduction.*** *CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.*
2. ***Congestive Heart Failure.*** *Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt).*
 Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. ***Hypotension.*** *Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.*
4. ***Acute Hepatic Injury.*** *In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)*

PRECAUTIONS

General. *CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes, however, these changes were reversible with continued dosing.*

Drug Interaction. *Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)*

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. *A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.*

Pregnancy. *Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.*

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. *Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.*

Pediatric Use. *Safety and effectiveness in children have not been established.*

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	*Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.*
Nervous System:	*Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.*
Gastrointestinal:	*Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.*
Dermatologic:	*Petechiae, pruritus, photosensitivity, urticaria.*
Other:	*Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarticular pain, polyuria, sexual difficulties.*

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. *Issued 7/86*

See complete Professional Use Information before prescribing.

References: ***1.*** *Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. Am Heart J 1983; 106(6):1341-1347.* ***2.*** *Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. Consultant 1984;24(Dec):150-159.* ***3.*** *Johnston DL, Lesoway R, Humen DP, et al: Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol 1985;55:680-687.* ***4.*** *Cahn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): Heart Disease: A Textbook of Cardiovascular Medicine, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39.* ***5.*** *Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. Mod Med 1982;50(Sept):94-116.*

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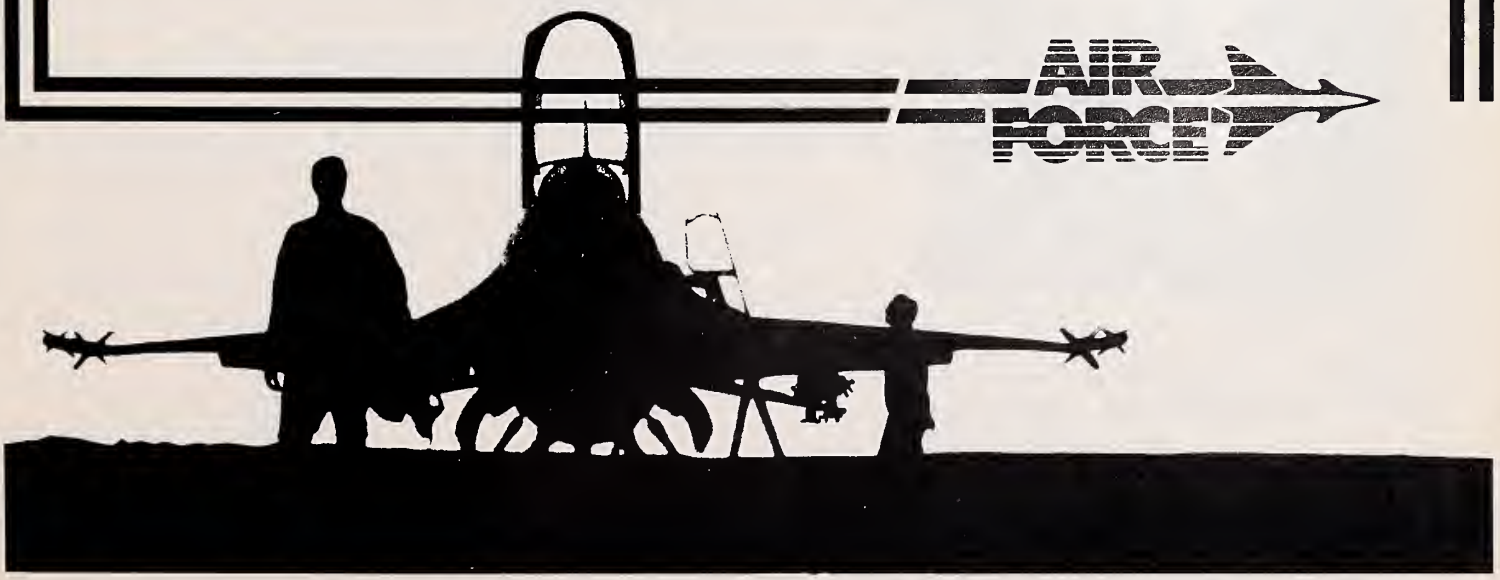
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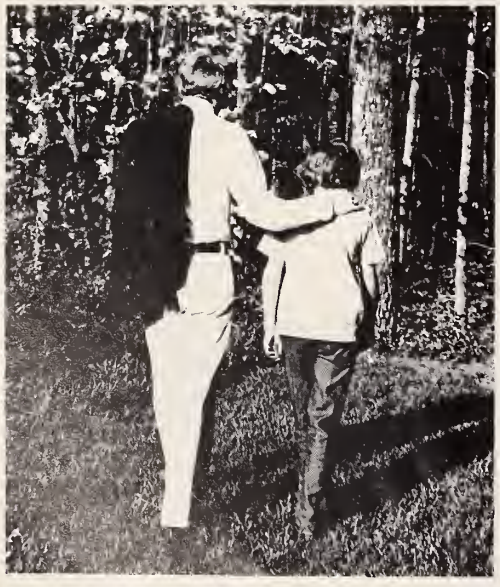
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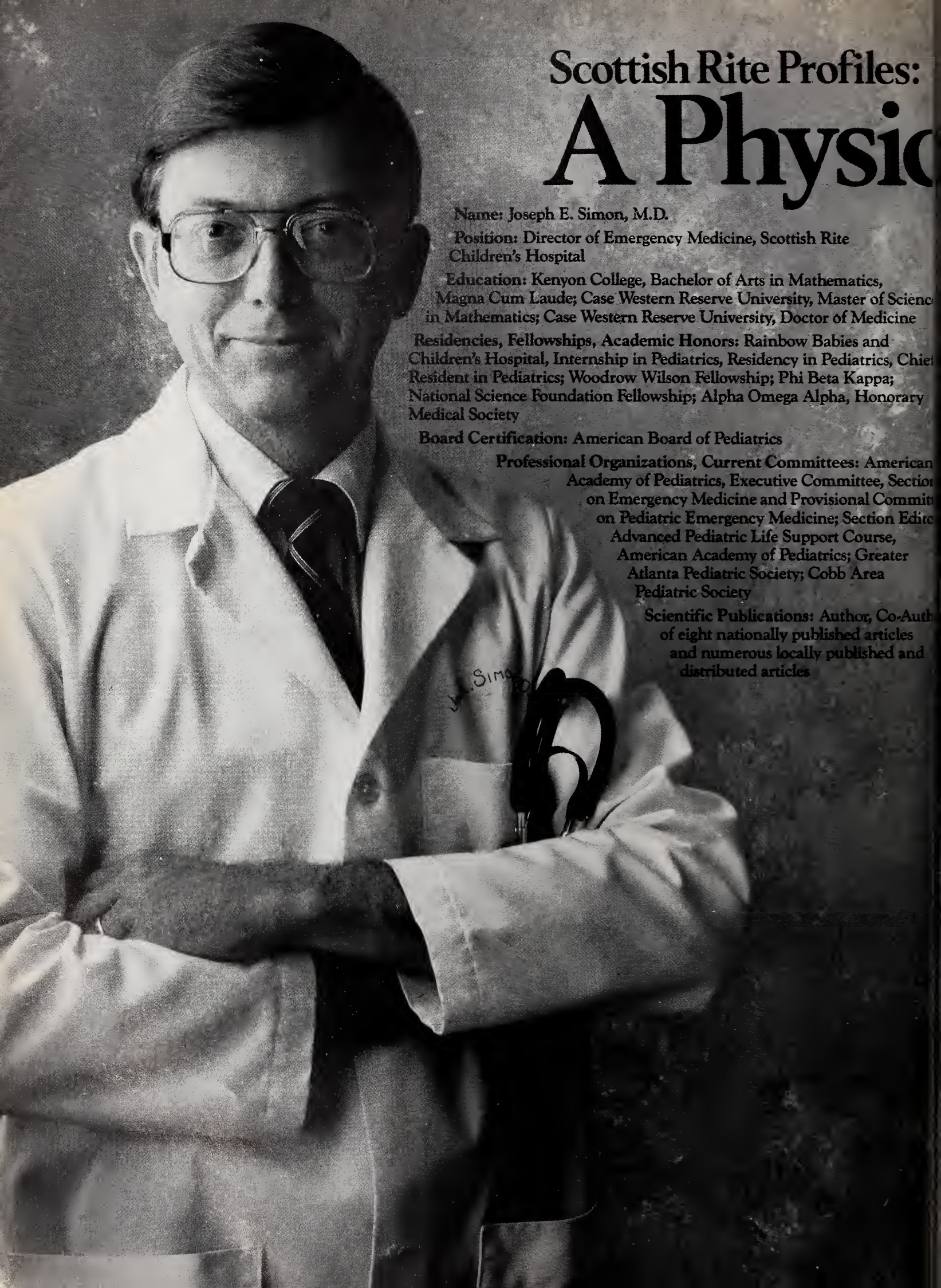
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Scottish Rite Profiles:
A Physic

Name: Joseph E. Simon, M.D.

Position: Director of Emergency Medicine, Scottish Rite Children's Hospital

Education: Kenyon College, Bachelor of Arts in Mathematics, Magna Cum Laude; Case Western Reserve University, Master of Scienc in Mathematics; Case Western Reserve University, Doctor of Medicine

Residencies, Fellowships, Academic Honors: Rainbow Babies and Children's Hospital, Internship in Pediatrics, Residency in Pediatrics, Chief Resident in Pediatrics; Woodrow Wilson Fellowship; Phi Beta Kappa; National Science Foundation Fellowship; Alpha Omega Alpha, Honorary Medical Society

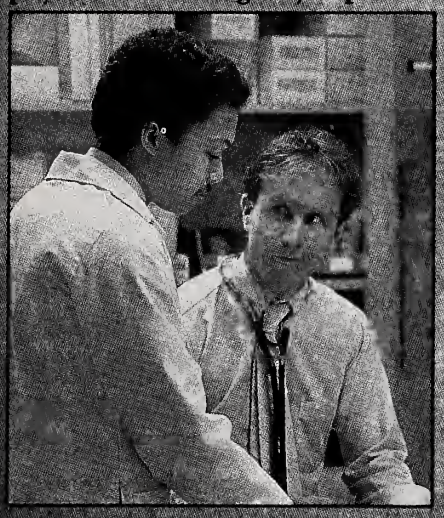
Board Certification: American Board of Pediatrics

Professional Organizations, Current Committees: American Academy of Pediatrics, Executive Committee, Sectio on Emergency Medicine and Provisional Commit on Pediatric Emergency Medicine; Section Edito Advanced Pediatric Life Support Course, American Academy of Pediatrics; Greater Atlanta Pediatric Society; Cobb Area Pediatric Society

Scientific Publications: Author, Co-Auth of eight nationally published articles and numerous locally published and distributed articles

ian's Physician

On being Director of Emergency Medicine at Scottish Rite: "The rapid expansion of the Emergency Department in total services and diversity of services offered has dominated my experience as Director of Emergency Medicine. In response to consumer and physician demand, SRCH has structured its emergency department to limit patient waiting time and guarantee continuity of care through involvement of private physicians in emergency depart-



ment decision making. Patient caseload has dramatically increased from 5,000 to 16,000 visits per year.

"In only two years our department has developed several significant Emergency Services programs including a "Holding Area" where extended therapy is provided and our "Fast Track" area for the use of private physicians in assessing their own patients. We originated the Georgia Pediatric Emergency Care Consultation Service, a joint project with the Emergency Health Section of the Georgia Department of Human Resources that provides consultation advice via a toll-free number to Emergency Departments throughout the state.

"Currently under development is a protocol for the emergency administration of clotting factor preparations to children with clotting disorders."

On the Scottish Rite Emergency Department staff: "The nature of Pediatric Emergency Medicine dictates that our physicians be highly skilled in the full gamut of emergency procedures. The staff meets and far exceeds this standard. Our physicians are actively engaged in research on emergency procedures including treatment of respiratory emergencies, and are developing one of only a handful of training programs in pediatric emergency medicine in the country.

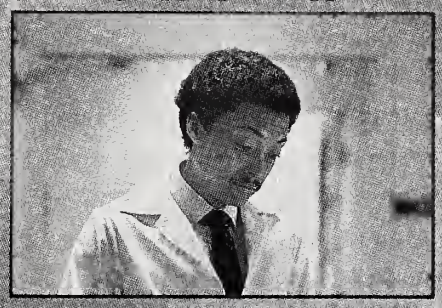
"One physician was recently invited to lecture at the First National Conference on Pediatric Emergency Care on the topic of "Pediatric Respiratory Emergencies." Several members of our nursing staff are advocates for children in the Emergency Nursing Association and through voluntary participation in courses developed for health professionals and programs for the lay public.

"The skill-level combined with the patient-oriented approach of our staff results in a high degree of patient and family satisfaction."



On the quality of Emergency Medicine at Scottish Rite: "State-of-the-art equipment and the experienced SRCH staff specifically trained in emergency medicine procedures enables us to deal swiftly and effectively with the most immediate areas of concern on the part of the children and their families: pain control and rapid evaluation/treatment. The quality of the actual diagnostic and treatment modalities at Scottish Rite is second to none. We have at our disposal, in addition to our Emergency Staff, the resources of the SRCH pediatricians and outstanding subspecialists in such areas as pediatric surgery, orthopaedics, reconstructive/plastic surgery, and neurosurgery.

"A high priority is placed on a gentle, age-appropriate approach



to reduce the anxiety level of the patient and to aid in establishing the child's trust in medical professionals essential to achieving optimum emergency treatment."

On the future of Pediatric Emergency Medicine: "Within the next five years, Pediatric Emergency Medicine will encompass an increasingly large share of total hospital services, not only because of increased use of traditional emergency services but also through expansion into specialty services which will replace more costly in-patient care.

"The trend toward out-patient treatment will make it financially feasible for large emergency departments to operate separate pediatric emergency units, and, emergency-oriented diseases such as meningitis will be treated in two or three days of in-patient services followed by out-patient visits to the emergency department for IV or IM antibiotic administration.

"Increasingly, third party funding of pediatric care will be a catalyst in the networking of emergency care services and information. This trend will enable physicians to match pediatric patients with the appropriate emergency facilities."

SCOTTISH RITE
CHILDREN'S HOSPITAL
1001 Johnson Ferry Road
Atlanta, Georgia 30363
404-256-5252

Close the Deal!



John D. Watson, Jr., M.D.

As any good manager will tell you, all the scurrying around means nothing unless you can *close the deal.* You can make good impressions, encourage people, and advance your position. But the real clincher is whether you *close the deal.* This is what PIP is all about — the MAG Physician Involvement Program. You will have received your letter from Dr. Jim Kaufmann and Rusty Kidd by now, requesting you to sign up for the coming Legislative Session. Let this be another reminder to SIGN UP and ATTEND. There has probably never been as important a time for your participation as *now* and during *this* Session.

"Through MAG's Physician Involvement Program, you have the unique opportunity to visit with your state representative and senator and communicate your views about legislative issues."

You will be briefed by MAG Staff as to the current issues other than Tort Reform, which is still number one. You will have that unique opportunity that only you can have to visit with your own Representative and Senator and to relay your position on the issues to him or her. You may think, "I shouldn't have to do this. They should know what OUR needs are and act." They may or may not, but they do respond to contact from their constituents.

Remember, there are others up there advising them to take positions contrary to our thinking. If you were the office holder and all you heard was from those who wish laws contrary to our position or no change, as in Tort Reform, how would you vote? You, the office holder, are there to represent your constituents and, even if your best judgment may be to the contrary, when you do not receive input from the voters informing you of their desires, how will you vote?

This should tell you that it is imperative that we make our presence felt and communicate directly with our elected officials. We could have 10 Rusty Kidds and 10 Jim Kaufmanns, but they cannot *close the deal* as you can with your elected officials. They do not live and work in the individual districts — they do not elect these individuals, as you do.

We have had excellent response to our Tort Reform Assessment. We have a good program in progress to the Public with the Liability Coalition. The momentum is on our side, I believe. Now it is time to *CLOSE THE DEAL* — and *you are the critical factor.* Become more involved, sign up for PIP as often as you can. This may be the best investment you have ever made.



CALENDAR

JANUARY

26-30 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

30-31 — *Atlanta:* **MAG 1987 Leadership Conference.** Contact MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

FEBRUARY

9-13 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

12-15 — *Atlanta:* **Ga. Psychiatric Association's Winter Meeting.** Category 1 credit. Contact James Moffett, Dir. of Specialty Society Relations, MAG, 938 Peachtree St., NE, Atlanta 30309. PH:404/876-7535 or 1-800-282-0224 (toll free in Ga.).

19 — *Atlanta:* **Cancer Prevention & Control for Black Americans.** Category 1 credit. Contact Janet Bonfiglio, Ga. Div., American Cancer Society, 1422 W. Peachtree St., Atlanta 30309. PH:404/892-0026.

20-21 — *Augusta:* **Flexible Fiberoptic Sigmoidoscopy.** Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

21-22 — *Atlanta:* **Georgia Society of Anesthesiologists Annual Meeting.** Category 1 credit. Contact John B. Neeld, Jr., MD, 1000 Johnson Ferry Rd., NE, Atlanta 30342: PH:404/255-7512 or Michael R. Murphy, MD, 1365 Clifton Rd., NE, Atlanta 30322: PH:321-0111.

23-27 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

25-March 1 — *Cozumel, Mexico:* **Scottish Rite Children's Hospital 9th Annual Pediatric Post-Graduate Course.** Category 1 credit. Contact Darlene Baugus, R.N., Ed. Dept., 1001 Johnson Ferry Rd., Atlanta 30363. PH:404/252-9377.

26-March 1 — *Sea Island:* **The Southeastern Angiographic Society.** Category 1 credit. Contact Dixie H. Harris, Exec. Secy., Southeastern Angiographic Society, P. O. Box 308, Hickory, NC 28603. PH:704/322-2871.

26-27 — *Atlanta:* **Optimizing Outcome For Survivors of Traumatic Head Injury.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

MARCH

2-7 — *Augusta:* **22nd Annual Family Practice Symposium.** Category 1 and AAFP prescribed credit. Contact Div. of Cont. Ed., MCG, Augusta 30912. PH:404/828-3967.

5-7 — *Atlanta:* **The 2nd International Interdisciplinary Conference on Hypertension in Blacks.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

9-13 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

16-18 — *Atlanta:* **Southeastern Surgical Congress.** Category 1 credit. Contact Roger Sherman, MD, Dir., SSG, 69 Butler St., Ste. 314, Atlanta 30303. PH:404/221-0570.

23-27 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

27 — *Atlanta:* **Communicating With the Speech, Language, or Hearing Impaired Adult.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

APRIL

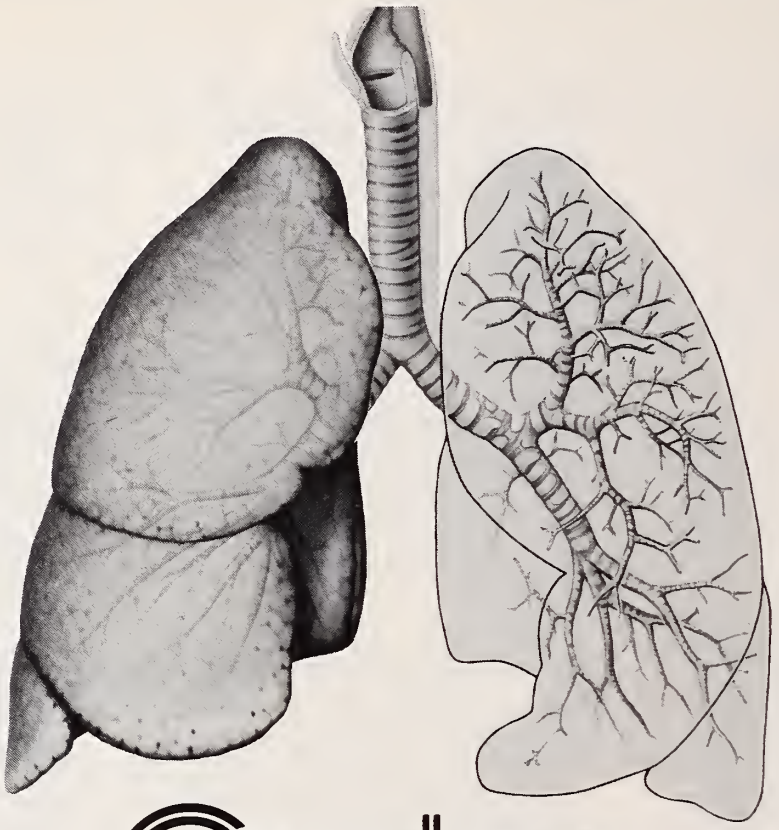
3-4 — *Atlanta:* **Biofeedback Applications for Patients with Musculoskeletal and Neuromuscular Disorders.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

3-5 — *Augusta:* **Ga. Chapter, American College of Surgeons Annual Meeting.** Category 1 credit. Contact Charles Howell, MD, Pediatric Surgery Section, MCG, Augusta 30912. PH:404/828-3941.

12-16 — *Atlanta:* **Gruentzig's Advanced Demonstrations in Percutaneous Transluminal Angioplasty XVI.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

13-17 — *Atlanta:* **Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.** Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., NE, Atlanta 30322. PH:404/727-5695.

Consider the causative organisms...



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cefaclor

250-mg Pulvules® t.i.d. offers effectiveness against the major causes of bacterial bronchitis

Haemophilus influenzae, H influenzae, Streptococcus pneumoniae, Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor® is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor® (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly)

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Freedom from pain

Just one part of pain relief therapy.

Vicodin® provides greater patient acceptance

COMPARATIVE PHARMACOLOGY OF THREE ANALGESICS

	CONSTIPATION	RESPIRATORY DEPRESSION	SEDATION	EMESIS	PHYSICAL DEPENDENCE
HYDROCODONE		X			X
CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975, 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93; 588-96.

- Vicodin offers: less nausea, less sedation, less constipation.

...and longer lasting pain relief– up to 6 hours.

- Vicodin contains hydrocodone not codeine. In one study, 10 mg. of hydrocodone alone was shown to be as effective as 60 mg. of codeine.[1]
- In a double-blind study, Vicodin (2 tablets), provided longer lasting pain relief than 60 mg. of codeine.[2]

Plus...

- Vicodin offers the convenience of CIII prescribing.
- Dosage flexibility–1 tablet every 6 hours or 2 tablets every 6 hours (up to 8 tablets in 24 hours).

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hydrocodone bitartrate 5 mg. (Warning: May be habit forming) with acetaminophen 500 mg.

The original hydrocodone analgesic.

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INDICATIONS AND USAGE: For the relief of moderate to moderately severe pain.
CONTRAINDICATIONS: Hypersensitivity to acetaminophen or hydrocodone.
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Drug Abuse and Dependence: VICODIN® is subject to the Federal Controlled Substances Act (Schedule III). Psychic dependence, physical dependence and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN should be prescribed and administered with the same caution appropriate to the use of other oral-narcotic-containing medications.
Respiratory Depression: At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.
Head Injury and Increased Intracranial Pressure: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.
Acute Abdominal Conditions: The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.
PRECAUTIONS:
Special Risk Patients: VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.
Information For Patients: VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.
Cough Reflex: Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.
Drug Interactions: The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.
Usage in Pregnancy: Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Nonteratogenic Effects: Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.
Labor and Delivery: Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.
Nursing Mothers: It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.
Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS:
Central Nervous System: Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.
Gastrointestinal System: Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.
Genitourinary System: Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.
Respiratory Depression: (See WARNINGS.)
DOSAGE AND ADMINISTRATION: Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.
The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982. S68S

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978
2. Beaver, WT *Arch Intern Med,* 141:293-300, 1981.

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hydrocodone bitartrate 5 mg. (Warning: May be habit forming) with acetaminophen 500 mg.

In Transition

THE EDITOR of this *Journal* for the past 32 years, Edgar Woody, M.D., finds it time to reposition himself with the *Journal,* not to retire but rather to assume less of the day-to-day responsibilities. To that end, he has recently become Editor Emeritus. He is to continue in an advisory and consultative capacity. The Publications Committee of the *Journal,* which is the Executive Committee of the MAG, has appointed me as interim editor. As the search for a permanent editor continues, I will occupy that position.

In agreeing to do so, I have made several requests of the Publications Committee. I have asked that the list of the contributing editors on the masthead be studied and revised. We are in the process of doing this. I have made suggestions as to changes in the publication which can help us maintain the *Journal's* present reputation of excellence as well as continue in the future to provide an interesting and informative medium for exchange of ideas among the members of the profession. I have been granted permission to write a monthly column with a view toward expressing personal views and opinions regarding topics that seem of importance.

Finally, the Publications Committee granted my request that the *Journal of the MAG* be allowed to continue its policy of journalistic independence, with the understanding that the membership of the Association and the officers thereof to whom has been entrusted the management of the affairs of the Association be always viewed as the ultimate authority governing the continuing journalistic policies of the publication. It is only in the unfettered environment of journalistic freedom that one can expect to derive the greatest benefit from any individual's effort. It would be my hope, then, that during this transition period, your interim editor and the Publications Committee can continue to produce a *Journal* that is respected among its peer publications, interesting and informative and provocative to the members of the Association, and to some degree controversial, in the sense that easy and ready answers or opinions are often dangerous and wrong. Or, as H. L. Mencken put it, "To every complex problem there is an answer which is simple, clear, and wrong."

* * *

Let Us Keep Christmas

The Christmas greeting card lay there in the drawer, full of memories of years past. It had been a wood block print done by the wife during those years of residency now so far in the distant past. It was, however, still legible and meaningful:

> *"Let us keep Christmas, its meaning never ends. Whatever doubts assail us or what fears, let us hold close this day remembering friends."*

Thus came to mind a "letter to the editor" of the *Journal* some years back commending a recently published article by a philosopher pertaining to the Christmas season. There followed a similar letter objecting to the use of the publication to expound a religious holiday sacred to only a segment of the profession. I wondered then, as now, if they and I were truly seeing the matter as it was. Had it not become a season, a "happening," perhaps even a "holiday" that could not in a total sense be ignored by any of us? The historical perspective, the "Christian orientation," was surely not argued or debated by anyone. I had found myself free to pursue my own Protestant beliefs, sociologically and genetically endowed, as I had chosen through the years. But had not "Christmas" become something beyond my own personal and nonexclusive "celebration" of the holiday? Had it not become something that my Jewish and Eastern religion friends could rightly claim some part of?

And so I wondered if we can get away from it, any of us, as a time of the year when we have no choice but to join in the feeling of something special happening, not something special necessarily in the Christian context, however, unless we so choose. But something "special" in the sense that there is indeed goodness and hope in and for the world. Something "special" in the sense that we are all going to slow down a bit, regroup in a sense, take stock of things and refuel for something new and different when January brings us to the threshold of a new year. Something "special" in the sense of remembering friends. Christmas seemed to belong to all of us. Perhaps Charles Dickens knew how to describe it best in *A Christmas Carol:*

> *"Christmas time, the only time I know of, in the long calendar of the year, when men and women seem, by one account, to open their shut-up hearts freely, and to think of the people below them as if they really were fellow-passengers . . . and not another race of creatures bound on other journeys."*

And so, with the Holiday Season upon us, let us celebrate the freedom to believe whatever we care to within the bounds of propriety, celebrate whatever we care to celebrate within the boundaries of discretion, but, above all, "Let us keep Christmas, for its meaning never ends."

Happy Hanukkah!
Merry Christmas!
Joyous New Year!

Charles R. Underwood, M.D.
Interim Editor

The Compleat Editor

After 32 years as Editor of the Journal of the Medical Association of Georgia, *Edgar Woody, M.D., has retired from that position and assumed a new position with the* Journal *as Editor Emeritus. We are indebted to him for his untiring and loyal service to the Association.*

Dr. Woody's tenure as editor for more than three decades is the second longest in the history of state medical journalism. Under his leadership, JMAG *has received awards for both excellence in design and editorial content. Moreover, in terms of advertising revenues, our publication has consistently been among the strongest state medical journals in the nation.*

For these achievements we are indebted to him. What follows are tributes by some of his colleagues who have offered their impressions of the man and his work and service with the Journal.

Dr. Ed Woody, The Editor

"Be ye doers of the Word and not hearers only."
JAMES, CHAPTER I, VERSE 22

ONE DAY a few years ago, Ed Woody walked into my office and said, "John, do you mind reviewing this paper for me? The subject is surgical, and I will appreciate your opinion. There is something I do not like about this paper, but I do not know what it is."

The editor of *JMAG* was correct. The paper was not only poorly written but also trivial and highly controversial. The author neither opposed nor supported a side and did not even support his so-called neutrality.

From that day on, Ed and I began a great friendship. Not only a friendship but also a true cooperation and dialogue about the papers that he honored me by asking me to review. Ed was always asking me, "Do you think this is a good paper for our journal and our subscribers? Do you think it is scientifically correct?" Wise questions from an editor who has vast experience. And Edgar Woody, the editor of the *JMAG* for 32 years, belongs to the selected group of editors, the same group that the Loyal Davis, and the Pilchers, the Zollingers, and Urists belong.

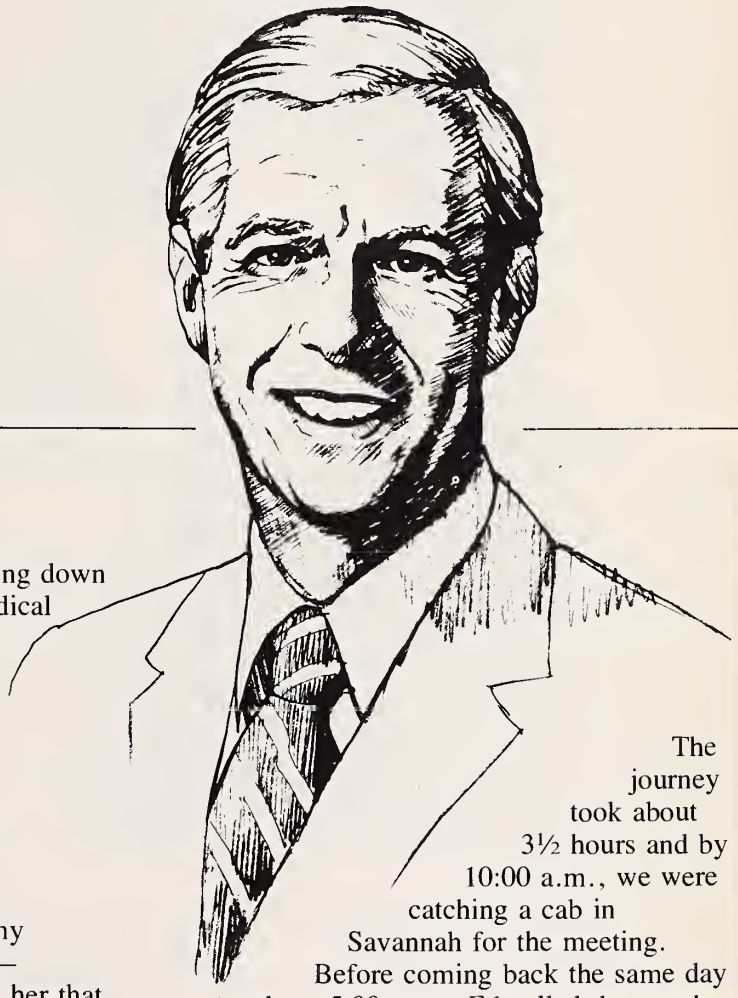
When I was asked to write something about Ed Woody, I wondered whether to write about the man, the practicing physician, or the editor. I had the opportunity to know the man; I am his surgeon. I know him also as a good doctor. I have often had the opportunity to appreciate the good care that Ed delivered to his patients. And of course, I have had the opportunity to work with him and to observe his work as an editor. I am sure as Editor Emeritus he will continue to advise and help the *Journal*.

Therefore, I have decided to write about the editor. He always kept in mind the prestige of the *Journal*. As a doorkeeper, he opened the door to allow the good visitor to enter, but also he was also able to close the door to hopeful authors with good intentions but poorly organized and badly written papers.

Once he told me, "Deadlines, John, are terrible, but they are part of the game, and they don't bother me anymore. The thing that I want to do is to have many papers and to be able to choose the best. To accomplish this, I must present to the readers a good journal, an appealing journal, a beautiful journal to read. But to have a lot of papers, I must present the 'right stuff.'" He knew that his beloved *Journal* could not survive with the philosophic combination of Scarlett O'Hara and Annie. The first stated, "I'll think about it tomorrow," and the second one said, "Tomorrow is always a day away." Ed Woody went out and with hard work, imagination, and perseverance developed one of the best state medical journals in the United States, a magnificent display of well balanced scientific reporting.

Brother Ed, the medical community of the State will never forget you for a job well done. Ed Woody, being a doer, will continue to give excellent service to his patients.

John E. Skandalakis, M.D.



Ed Woody, The Pilot

In 1960, a group of Atlanta internists, just beginning in practice, formed a journal club that met at one of the members' houses each month. Ed Woody, the late Grant Wilmer, Peter Cline, Leigh Scott, and I composed the group. Each member reviewed one journal of his choice for the discussion of his colleagues at each meeting. We also were preparing for Internal Medicine Boards.

After a couple of hours of journal review, the real fun began over beer and popcorn. Each told how his practice was going. We argued over what fees we should charge and speculated as to what some of the most successful practitioners were charging. Another major topic was who had been accepted to the staff of which hospital. A major problem for new physicians in Atlanta of the early 1960s was the acute shortage of hospital beds. Many of us had great trouble finding a bed even for emergencies. There were only five private hospitals, and most were not accepting new staff unless they were new members of groups already on the staff.

At one of these meetings, Ed Woody casually announced that he was taking flying lessons and had become part owner of an airplane. We were all greatly impressed, and I was not a little envious.

A few months later, Ed told the group that he was flying down to Savannah for a medical meeting and asked if anyone would like to go with him. I jumped at the chance — never having flown in a private plane and also anxious to attend this meeting. Later that evening when I told my wife she was aghast — especially when I told her that Ed had only been flying a few months.

A few days later, I met Ed at 6:00 o'clock on a cool but sunny September morning. When I saw his plane, *I* was aghast! It was much smaller than my car. The wings didn't come up to my waist. It looked like a toy. It was a single engine 2 seater (side by side) Aircoupe. Ed and I could easily have picked it up. I was tempted to back out of this adventure but I thought to myself, "Now, you know how careful and cautious Ed is, how thoroughly he reviews his journal assignments, how conservative he is about his patients and fees, how excellent was his training and judgment." These thoughts consoled me somewhat, and I squeezed in beside him. To my amazement this little toy lifted us easily into the air. I was enthralled but soon very uncomfortable. My head was ice cold and my feet seemed to be sitting right on the red hot engine.

The journey took about 3½ hours and by 10:00 a.m., we were catching a cab in Savannah for the meeting.

Before coming back the same day about 5:00 p.m., Ed called the weather bureau and also filed our flight plan. There was not a cloud in the sky until we got near Atlanta and then we could see great pillars of storm clouds that looked harmless to me but that concerned Ed greatly. We carefully went around them by a wide margin. We landed safely, and I was relieved but happy. My faith in Ed was justified.

Over the next 25 years, Ed demonstrated again and again by his editorship of the *Journal of the Medical Association of Georgia* and his good citizenship that he was and is indeed a careful, meticulous, well trained, cautious but forward looking and adventurous person.

His patients and I trusted him with our lives, and he proved he was worthy of that trust. The past 25 years of the archives of the *Journal* are testimony of his character.

Joseph A. Wilber, M.D.

EDITORIAL

Edgar Woody, Behind the Scenes

The world is composed of many types of people — those whose presence you cannot ignore, some people getting something done, others getting nothing done. Then there are a few who prefer to remain out of the limelight, and you have to look for them to be sure they are there; however, things have happened, and you know they have been around. They are efficient and productive in an unobtrusive manner. They get things done behind the scenes, but their accomplishments are obvious.

The latter description is my impression of Dr. Edgar Woody, whom I have known longer than the 32 years he has served as Editor of the *JMAG*. I remember when he became editor of the *Journal*. There was no fanfare, big noise, or big splash on the pages of what he was going to do.

The state medical society has been impressed by his sincerity, diligence, ability, and his constant striving to make the *Journal* better, which he has done. Consequently, the physicians and eventually the patients of Georgia have profited by his labors. Our *Journal* has been recognized as one of the best in the nation.

I have been honored to have served on the *Journal's* Publications Committee with Edgar Woody, and I simply say, "A job well done." We tend to take such people for granted, but we are all indebted to the fine job that he has done over the years.

Milford B. Hatcher, M.D.

What Is An Editor?

WE SAT THERE together talking — Edgar Woody, M.D., and I — and I kept at him about the matter, what is an editor? "What should the editor of a major state medical association journal be? What kind of person are *you*?" I asked.

He had taken the job in 1954 — after only 2 years into private practice in the City of Atlanta. He held it for the next 32 years without interruption. And so I thought to myself, "He must be something different, something unusual. I couldn't understand 32 years of effort on this kind of thing."

I thought about my own situation at that point in time — 2 years into private practice, loans to be repaid, children to feed and educate, a house with a monumental mortgage, no stable practice of note — the last thing I needed was a thankless job with the *Journal* of the state medical society. But he had taken it and kept it for 32 years — and now he was leaving it.

Thirty-two years of reviewing articles submitted or requesting they be submitted, and trying as best as one might to assure the accuracy and the adequacy of them. Thirty-two years of assuring financial support, of garnering advertising of acceptable nature. Thirty-two years of being judged by peers to have done ill or well in a job that paid little.

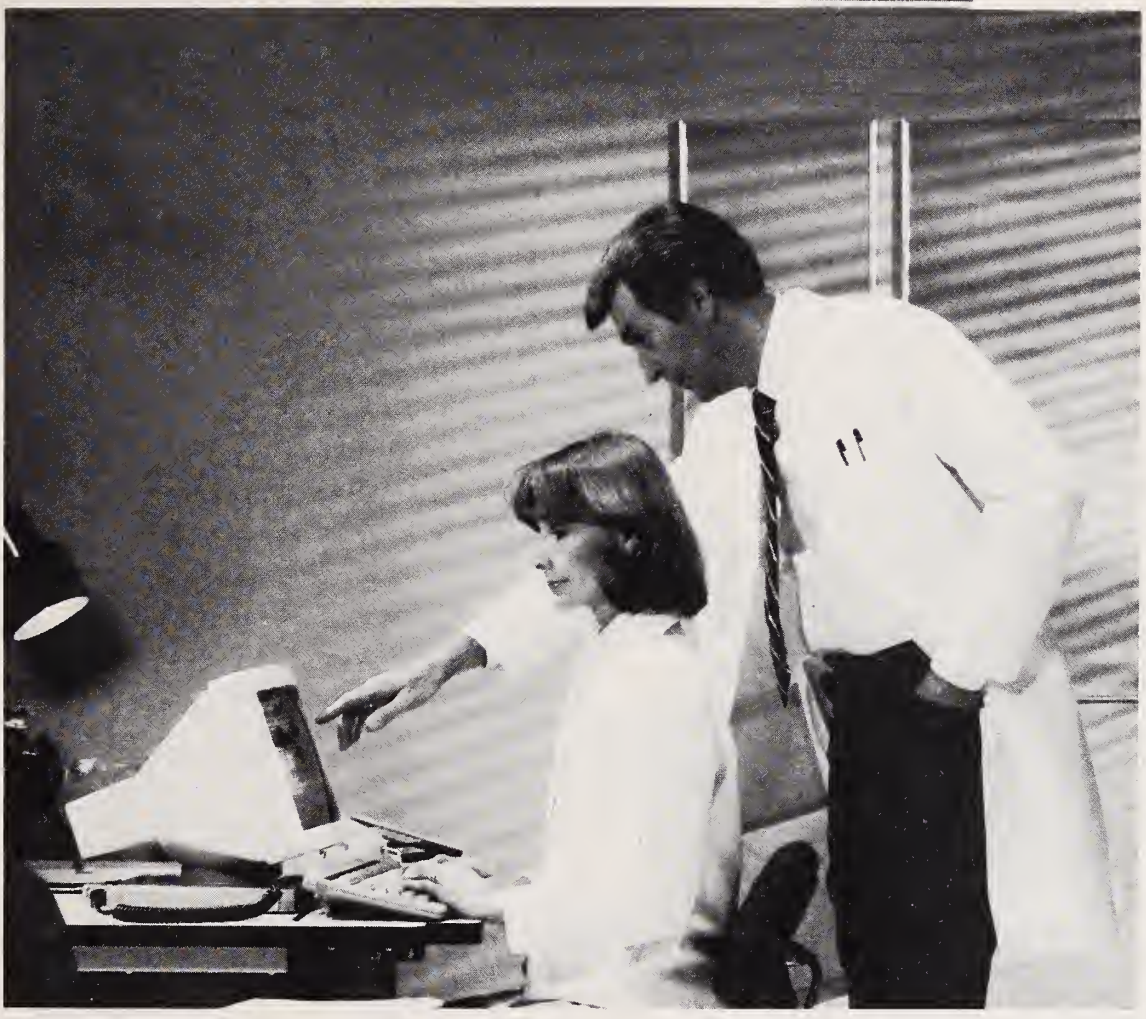
"What in the world were you trying to accomplish?" I asked.

"Trying to keep the quality up," he said, "trying to keep it varied and interesting, to keep it something that the Medical Association of Georgia could be proud of and recognized for, something that they could all say, my organization did this, though not knowing where to give the credit."

I began to think that I had perhaps gained at least a glimpse of this quiet and unassuming man. Had I come to understand what an editor is or is supposed to be? Perhaps not. I had, however, come to understand what this particular editor had been. He had mothered and nurtured, groomed and stroked the *Journal of the MAG* to a point of excellence and had done so in such a quiet manner that few, if any, of his peers realized how many years had passed, how much effort had been expended, to bring the *Journal* to its award-winning position.

The time had come for him to retire from the position as editor, time to relinquish some of the day-to-day responsibilities and yet not to relinquish input, for he was to continue advising and suggesting. We parted, then, each to return to his own private world. Funny, I thought, that so much can go on, and so many things be accomplished, by the quiet unobtrusiveness of a man like Edgar Woody. He seemed to have a stolen quietly upon us, left a gift at the front door, and walked gently away before we could say "thank you."

Charles R. Underwood, M.D.



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What Is MAG Doing For Tort Reform?

ON BEHALF of its 6,700 members, the Medical Association of Georgia is taking an active role in a broad-based campaign to bring about the legislative changes necessary to end the liability crisis. The Association is working with many other professionals and business groups affected by the liability crisis by participating with them in the Georgia Liability Crisis Coalition. The MAG is also working independently, sponsoring seminars and workshops to raise legislative, professional, and public awareness of the issues and effects of the crisis.

The Association is currently implementing a major communications program for the liability crisis targeted at three primary audiences: physicians, patients, and legislators. The communication objectives for each audience are somewhat different. For physicians, the campaign is designed to increase awareness of MAG's active role in changing Georgia law to favorably impact liability, and provide MAG members opportunities to participate individually to influence the change. For patients, the campaign will be used to increase awareness of the impact the liability crisis has on their daily lives, and encouarge their active participation to affect change in the law. And, finally, for legislators the campaign is aimed at educating and influencing these elected officials thorugh lobbying, information-giving, and grass roots support from physicians and their patients to favorably change Georgia laws regarding liability.

The theme for this campaign is "Warning: Excessive Liability Costs May Be Hazardous To Your Health." This slogan is a memorable one — generic in nature, easily understood by most anyone — and it generates immediate recognition and curiosity. The original phrase was (and is) part of a government sponsored program to warn consumers of the hazards of smoking. The concept, therefore, had a level of credibility we did not need to establish. This new phrase, however, has different meanings for different groups.

Physicians may define "hazardous to your health" to mean detrimental to the health of their practice and their future, while patients may define this phrase as the inaccessibility of medical care or the ever-increasing health care costs — both of which deter patients from obtaining needed medical care. Legislators, on the other hand, may find that "hazardous to your health" translates into the overall effects of the liability crisis on the health of their constituents. For all three audiences, the campaign theme signifies the negative consequences of the liability crisis.

In addition to the slogan, various campaign materials have been assembled in order to spread the "Warning" message. One particular item is the "Physician's Survival Kit," a large package of information for physicians which details the liability crisis, outlines what measures physicians can take to help bring it under control, and provides materials that can be used to educate their patients and others. Some of the components of the survival kit include a:

- liability button
- cassette tape outlining the plan
- counter card and 50 patient liability brochures
- list of Liability Coalition Members
- sample letter to patients stressing the severity of the crisis

The Medical Association of Georgia is also promoting other tort reform-related activities. The Association has just completed tabulating new physician and resident physician surveys on the liability crisis and the results of these surveys have been published in this issue of the *Journal*. MAG's President has served as a member of the Governor's Task Force on Professional Liability and MAG continues to negotiate with other related organizations, always in the best interests of MAG. The MAG is holding its Annual Leadership Conference in February, a conference that will deal in large part with tort reform and the liability crisis. And, finally, the MAG is, once again, gearing up for its **Physician Involvement Program (PIP) — one of the most direct methods physicians have of influencing decisions in the legislature. It is crucial that every MAG member contribute at least 3 days of his or her time at the Capitol if we are to make the impact we desire.**

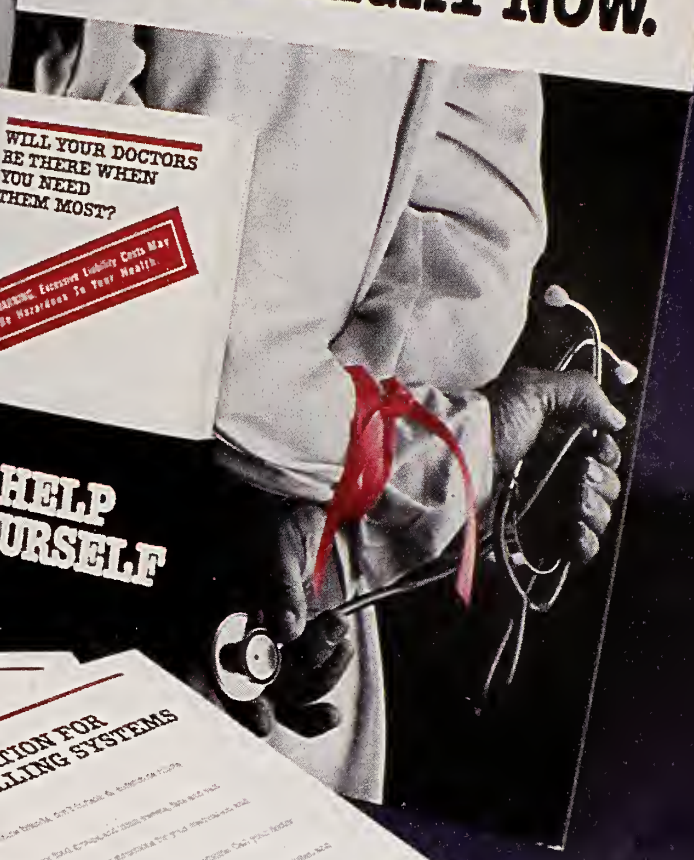
To curb this crisis will not be easy: there is strongly entrenched and well organized opposition to be overcome. There is no doubt, however, that reform is vital to the future of health care in Georgia, and the MAG requests the support of physicians and other concerned Georgians in ensuring that the legislation required is passed by the 1987 session of the State Legislature.

James A. Kaufmann, M.D.
Chairman
MAG Legislation Committee

PHYSICIAN'S SURVIVAL KIT

WARNING: Excessive Medical Liability Costs May Be Hazardous To Your Health.

THE DOCTOR IS TIED UP RIGHT NOW.



WILL YOUR DOCTORS BE THERE WHEN YOU NEED THEM MOST?

WARNING: Excessive Liability Costs May Be Hazardous To Your Health.

HELP YOURSELF

STATE OF HEALTH

Issues In Cont...

SAMPLE LETTER TO PATIENTS

A SPECIAL MEMO TO THE OFFICE MANAGER.

HEALTH TIPS AND LIABILITY INFORMATION FOR COMPUTERIZED BILLING SYSTEMS

HEALTH TIPS

LIABILITY INFORMATION

SOUND IDEAS FOR MANAGING THE LIABILITY CRISIS

WARNING: Excessive Liability Costs May Be Hazardous To Your Health.

WARNING: Excessive Liability Costs May Be Hazardous To Your Health.

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WARNING: Excessive Liability Costs May Be Hazardous To Your Health.

WARNING: Excessive Liability Costs May Be Hazardous To Your Health.

Handling High Blood Pressure

Coping With Colds and Flu.

Important Information About Prescription Drugs.

How to Eat Right.

How to Stop Smoking

WARNING: Excessive Liability Costs May Be Hazardous To Your Health.

WARNING: Excessive Medical Liab
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MAG'S 1987 LEADERSHIP CONFERENCE

TORT REFORM AND MALPRACTICE LITIGATION TODAY'S DEMAND FOR QUALITY OF CARE PRESSURES IN THE MEDICAL MARKETPLACE

JANUARY 30-31, 1987
WAVERLY HOTEL
ATLANTA

It's become a "regular," a must-attend meeting for hundreds of our members: MAG's Annual Leadership Conference.

Why? Because nowhere else in the state do practicing physicians get the latest word, from the most qualified speakers, on tort reform, the state of private practice, alternative delivery systems—the whole range of today's medical socioeconomics.

Once again, next January 30-31, the Medical Association of Georgia invites *all Georgia physicians*, auxilians, county and specialty society staff to attend our 1987 Annual Leadership Conference.

OUR EFFORTS FOR TORT REFORM IN THE 1987 GEORGIA GENERAL ASSEMBLY

THE PRESSING DEMAND FOR QUALITY OF MEDICAL CARE IN A COST-CONSCIOUS SOCIETY

THE FUTURE OF PRIVATE PRACTICE

. . .these are just the highlights of our day-and-a-half meeting. The complete schedule appears in this *Journal*, along with your Registration Form. We invite you to examine our program—it's MAG's best Leadership Conference yet—and to join us at the meeting!

REGISTRATION FOR THE MEETING

All Georgia physicians are invited to attend the 1987 MAG Leadership Conference. MAG members and auxilians are especially urged to participate.

To register, please complete the registration form inserted in this *Journal*, detach it from the hotel registration form, and mail it with your registration fee to the MAG Office.

	MAG member	*NON member*
Physician	$75	$175
Resident Physician	$25	
Auxilian	$25	
Medical Society Executive	no charge	

If you wish hotel accommodations at the Waverly, please detach and complete the bottom portion of the registration form and mail it directly to the hotel by January 8, 1987.

Conference Highlights

Friday Afternoon

To open our meeting, we are privileged to have as our Keynote Speaker, Dr. James H. Sammons, Executive Vice President of the American Medical Association. This is Dr. Sammon's first speaking engagement for an MAG Leadership Conference. With all of AMA's wide-ranging activities—legislation, socioeconomics, health care advocacy, education—we thought it a good time to invite Dr. Sammons. His topic will be "Organized Medicine's Challenges Today."

Concerns for maintaining quality of medical care is emerging in influential circles of the medical community. We have therefore arranged for a truly distinguished panel of physicians to present three viewpoints on the subject. Dr. Arnold Relman is well known as Editor of the *New England Journal of Medicine*, and as a spokesman for the practicing physician. Dr. Dennis O'Leary gained renown as spokesman for George Washington University Hospital when President Reagan was treated there for his bullet wound; now, as President of the Joint Commission he is contributing significantly to the national discussion over new concerns for high quality care. Dr. Sidney Wolfe is Director of the Health Research Group, the part of Ralph Nader's Public Citizen organization responsible for health advocacy. He and Dr. O'Leary have debated each other on "Good Morning America"; his topic for our Leadership Conference is "Does Litigation Affect Quality of Care?"

After giving our speakers an opportunity to address each other, the floor will be opened for discussion by the audience. We expect a stimulating afternoon.

On Friday evening, all Leadership Conference attendees—physicians, spouses and guests—are invited to attend our reception from 6:00 to 7:30 p.m.

Saturday Morning

Tort reform is one of MAG's most urgent initiatives today, and we're working hard to bring about legislation on professional liability insurance in next year's General Assembly. Much will have happened by late January. To give us his personal legislative update on tort reform, we have scheduled the Honorable Zell Miller. It will be a privilege to have the Lieutenant Governor address us again.



Tort reform is a national issue, too. Bringing us up-to-date on the activities of the AMA and the American Tort Reform Association will be Ross Rubin, J.D., Director of the American Medical Association's Division of Federal Legislation.

Then we approach the personal side of malpractice litigation. Dr. Sara Charles of Chicago is the nation's most acclaimed authority on what's being called "malpractice stress syndrome"—the psychological and emotional hurts suffered by a physician and his family when they undergo the professional liability lawsuit. She'll talk about how physician support groups are being formed around the country by medical societies. Dr. Earnest Aktins, Chairman of MAG's Committee on Professional Liability Support Groups and Mrs. Barbara Tippins, President of our MAG Auxiliary, will introduce her.

Saturday afternoon

After lunch we turn to the medical marketplace. We've all become aware of the federal Health Care Financing Administration's increasing role with medical care providers. Richard Kusserow, Inspector General for the U.S. Department of Health and Human Services, will tell us more about the government's latest activities in evaluating physicians' performance.

You may recall that we had Dr. Paul Ellwood speak at our 1984 Leadership Conference on how solo practitioners and small groups would likely fare in the increasingly competitive medical marketplace. We think it's time for an update from him, but we want to provide a different viewpoint, too. As you may have seen in *Medical Economics* and *The Wall Street Journal*, Brant Mittler, M.D., is cofounder of a group of San Antonio physicians known as "Physicians Who Care"—an organization challenging HMO's and promoting private practice. He should be able to provide contrasting ideas on prospects for the solo or small group practice. We're pitting Drs. Ellwood and Mittler together in a debate, including time for the two speakers to ask questions of and rebut each other. (Dr. Mittler, by the way, was a college debater for three years, and leader of his debate team.) We expect a lively exchange of opinions.

A NIGHT AT THE SYMPHONY?

As an optional activity for Leadership Conference attendees on Saturday evening, the MAG has arranged for a block of tickets at reduced prices to the Atlanta Symphony's concert that evening. Louis Lane will conduct Smetana, "The Moldau," and Strauss, "Also Sprach Zarathustra." Featured soloist will be Rudolf Firkusny for Dvorak's Piano Concerto.

Special MAG ticket prices for this concert are $9.00, $13.50, and $15.20. Physicians and spouses interested in attending the Symphony on January 31 should call or write Donna Glass of the MAG staff. We need a group of at least 25 people to offer this entertainment service.

A FINAL WORD

We're excited about our 1987 Leadership Conference, and believe that it's MAG's best yet. We're convinced that the quality of our speakers and array of topics are just as distinctive and compelling as those provided at AMA's excellent Leadership Conference in Chicago. And our meeting is so much closer. . .
So join us at the Waverly next January!

MAG'S 1987 LEADERSHIP CONFERENCE PROGRAM

FRIDAY AFTERNOON, JANUARY 30

THE CONTINUING CHALLENGE OF PATIENT CARE

1:00 **WELCOME & INTRODUCTION**
John D. Watson, Jr., M.D., President
Medical Association of Georgia

1:00 – 1:30 **1987 LEADERSHIP CONFERENCE KEYNOTE SPEAKER**

"Organized Medicine's Challenges Today"

James H. Sammons, M.D.
Executive Vice President
American Medical Association

1:30 – 1:45 **COMMENTS FROM THE AUDIENCE**

THREE PERSPECTIVES: THE CONTINUING CHALLENGE OF HIGH-QUALITY CARE

1:45 – 2:05 **WHAT ARE THE PRACTITIONER'S RESPONSIBILITIES FOR QUALITY OF CARE?**
Arnold S. Relman, M.D., Editor
The New England Journal of Medicine

2:05 – 2:30 **NEW JOINT COMMISSION INITIATIVES IN ASSURING QUALITY OF CARE**
Dennis S. O'Leary, M.D., President
Joint Commission on the Accreditation of Hospitals

2:30 – 2:55 **DOES LITIGATION AFFECT QUALITY OF CARE?**
Sidney M. Wolfe, M.D., Director
Public Citizen's Health Research Group
Washington

2:55 – 3:15 **BREAK**

3:15 – 3:45 **THE PANELISTS RESPOND TO EACH OTHER**

3:45 – 5:00 **QUESTIONS & DISCUSSION FROM THE AUDIENCE**

6:00 – 7:30 **LEADERSHIP CONFERENCE RECEPTION**
Registrants, spouses and guests invited

SATURDAY, JANUARY 31

MORNING SESSION

TORT REFORM AND MALPRACTICE LITIGATION

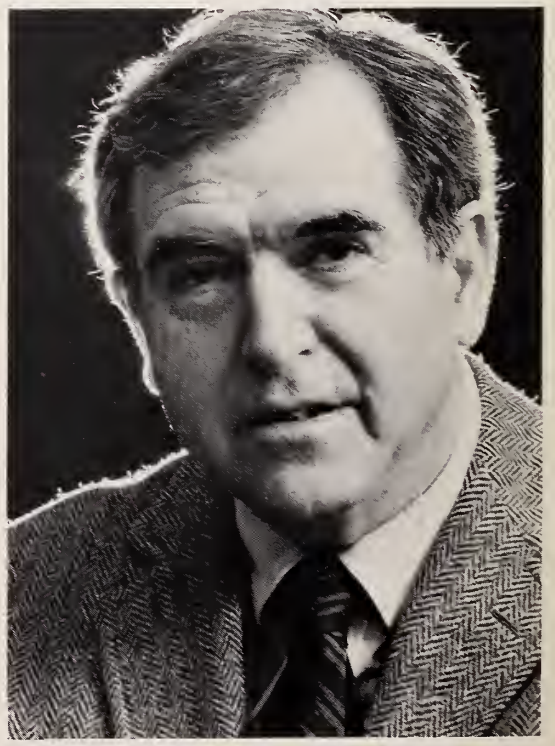
9:00 **INTRODUCTION OF GUEST SPEAKER**
James A. Kaufmann, M.D., Chairman
MAG Council on Legislative Affairs



Richard Kusserow, Inspector General for the Department of Health and Human Services, will explain new federal legislation to assess physicians' quality of care.



Dr. Dennis O'Leary, President of the Joint Commission, is a panelist with Dr. Relman and Dr. Wolfe, discussing the continuing challenge of high-quality care.



Editor of the ***New England Journal of Medicine,*** *Dr. Arnold Relman is one of our speakers scheduled for Friday afternoon.*

JANUARY 30-31, 1987 – WAVERLY HOTEL, ATLANTA

9:10 – 9:35 **GEORGIA'S PROSPECTS FOR TORT REFORM**
The Honorable Zell Miller
Lieutenant Governor
State of Georgia

9:35 – 10:00 **QUESTIONS AND DISCUSSION**

10:00 – 10:20 **TORT REFORM: THE NATIONAL PERSPECTIVE**
Ross N. Rubin, J.D.
Director
AMA Division of Federal Legislation

10:20 – 10:35 **QUESTIONS AND DISCUSSION**

10:35 – 10:50 **A SPECIAL CEREMONY: HONORING THE PRESIDENTS OF OUR STATE SPECIALTY SOCIETIES**
John D. Watson, Jr., M.D., President

10:50 **INTRODUCTION: THE EMERGENCE OF MALPRACTICE STRESS SYNDROME**
Earnest A. Atkins, M.D., Chairman
MAG Committee on Professional Liability Support Groups

Mrs. William C. Tippins, Jr., President
Auxiliary to the Medical Association of Georgia

11:00 – 11:20 **THE PHYSICIAN, THE FAMILY AND THE STRESS OF BEING SUED**
Sara C. Charles, M.D., Associate Professor of Clinical Psychiatry
University of Illinois
College of Medicine

11:20 – 11:30 **QUESTIONS AND DISCUSSION**

11:30 – 1:00 **LUNCH ON YOUR OWN**

AFTERNOON SESSION

PRESSURES IN THE MEDICAL MARKETPLACE

1:00 **INTRODUCTION . . . Dr. Watson**

1:05 – 1:30 **GOVERNMENT'S EXPANDING ROLE IN MONITORING QUALITY OF CARE**
Richard P. Kusserow, Inspector General
U.S. Department of Health and Human Services

1:30 – 1:45 **QUESTIONS AND ANSWERS**

DEBATE: DO SOLO AND SMALL GROUP PRACTICES HAVE A CHANCE?

1:45 – 2:10 Paul M. Ellwood, Jr., M.D.
President
Paul Ellwood & Associates
Excelsior, Minnesota

2:10 – 2:35 Brant S. Mittler, M.D.
Vice President
Physicians Who Care
San Antonio

2:35 – 3:00 **SPEAKERS' REBUTTAL**

3:00 – 4:00 **QUESTIONS AND DISCUSSION FROM THE AUDIENCE**

4:00 **ADJOURN**



Since 1972, Dr. Sidney Wolfe has worked with Ralph Nader's organization as advisor on health advocacy and the public interest.



Dr. James Sammons, AMA's Executive Vice President, will be our 1987 Leadership Conference Keynote Speaker.



On Saturday afternoon, Dr. Paul Ellwood and Dr. Brant Mittler will debate each other on "Do Solo and Small Group Practice Have A Chance?" Dr. Ellwood, of Excelsior, Minnesota, is well known as a developer of physician-hospital joint ventures and a proponent of HMOs and PPOs. Dr. Mittler, of San Antonio, is co-founder of Physicians Who Care, a group of practitioners dedicated to fighting corporate medicine and promoting private practice.



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Progressions is Brawner's partial hospitalization program for adults requiring intensive therapeutic intervention without 24 hour care. This viable alternative to inpatient hospitalization provides a supportive program to facilitate outpatient treatment. Progressions can also be a safe transition from inpatient hospitalization to a less intensive form of treatment, offering a crucial support as the patient moves towards increasing family, community and career responsibilities.

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CAROTID BODY TUMORS

MARK J. COSTANTINO, M.D., THOMAS A. MONTGOMERY, M.D.

A report of two cases with emphasis on the use of duplex scanning for diagnosis.

Abstract

This paper presents two patients with benign carotid body tumors. These patients are discussed in detail and the subject of carotid body tumors is reviewed including the history, embryology, diagnosis, treatment, and prognosis of this unusual neoplasm. Emphasis is placed on the use of Duplex Scanning as a possible diagnostic screening test in patients with neck masses. Surgical techniques including the use of vein grafts and cerebral protection are presented. The literature is reviewed.

Introduction

CAROTID BODY TUMORS or chemodectomas are rare neoplasms arising at the carotid bifurcation. These tumors generally present as a mass in the neck which may be asymptomatic or cause a variety of symptoms. Definitive diagnosis has relied upon arteriography which presents a characteristic tumor blush at the carotid bifurcation. Vascular surgeons are frequently asked to evaluate patients with prominent carotid bulbs to rule out a carotid body tumor. A noninvasive test to help evaluate these patients would be useful. This paper presents two patients with carotid body tumors one of whom was diagnosed by B-mode ultrasonography (Biosound).

Case reports

Case 1:

The patient is a 73 y/o white male with a long standing left neck mass. He had no particular symptoms except that the mass had been enlarging recently. Physical examination revealed a large 6-8 cm firm mass in the left anterior neck. A CT scan showed that the mass extended to the midline and almost to the base of the skull. An arteriogram confirmed the diagnosis of a large carotid body tumor. On 8/27/82, he underwent resection of the tumor including the carotid bifurcation and revascularization with a reversed saphenous vein. Postoperative course was unremarkable except for a vocal cord paralysis which slowly improved. Histologically, the tumor was a typical benign carotid body tumor. Although the mass was incompletely excised, there has been no evidence of clinical recurrence after 3 years.

Drs. Costantino and Montgomery are with the Department of Vascular Surgery, Athens General Hospital, 1199 Prince Ave., Athens, GA 30613. Send reprint requests to him.

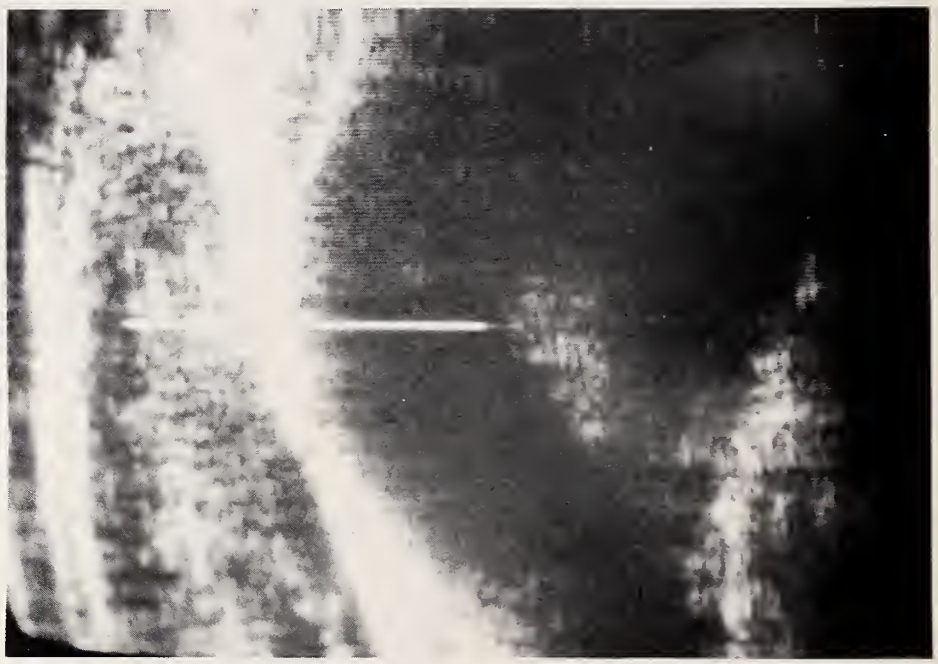
Case 2:

The patient is a 33 y/o white female with a right neck mass which had been present for 1 year. Her only symptom has been a single episode of syncopy. Physical examination revealed a firm 2 cm mass at the right carotid bifurcation. A carotid ultrasound scan (Biosound) revealed a soft tissue mass at the carotid bifurcation and marked asymmetry compared to the left carotid bifurcation, with wide separation of the internal and external carotid arteries. A subsequent arteriogram revealed a 4 cm vascular tumor consistent with a carotid body tumor. On 6/20/84, she underwent resection of the tumor including the carotid bifurcation and revascularization with a reversed saphenous vein. Histologically, the tumor was a typical benign carotid body tumor. The postoperative course was unremarkable, and there has been no evidence of recurrence. The left carotid bulb has remained normal.

Discussion

Carotid body tumors are rare neoplasms arising from the paraganglion cells of the carotid body. They are

also known as chemodectomas, paraganglionomas, nonchromaffin paraganglionomas, and glomus tumors. Their exact etiology is not known, although the consensus is that they arise from paraganglion cells probably of neural crest origin.[1] These cells normally function as chemoreceptors responding to hypoxia and acidity. They are found in a variety of locations throughout the body including the glomus jugular, middle ear, ganglion nodosum, aortic arch, and pulmonary vessels, as well as within the abdomen and retroperitoneum. Tumors may arise in all of these locations; however, the most common site is the carotid body.



1. Duplex scan of right carotid bifurcation of case two. Note the lateral displacement of the internal carotid artery by the carotid body tumor.

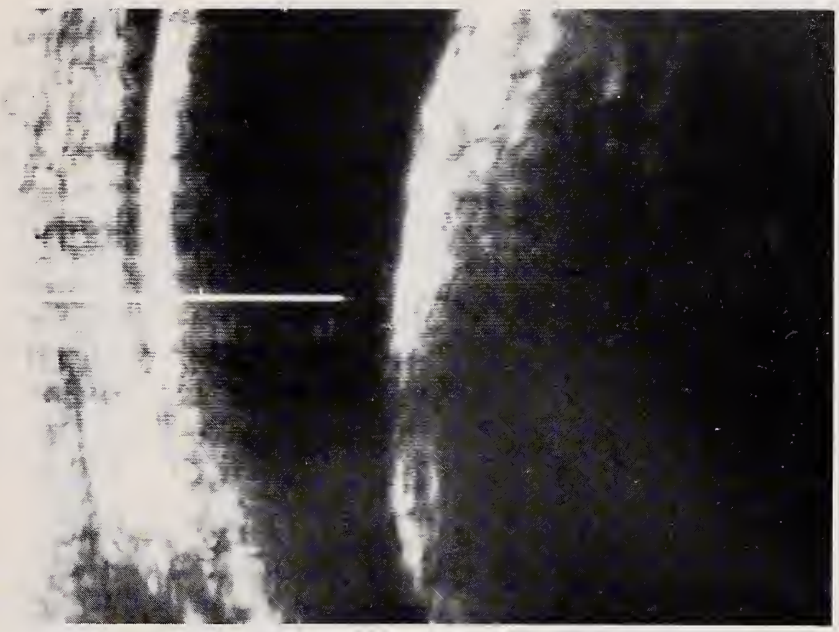
"An arteriogram is certainly necessary prior to operative treatment of these tumors not only for diagnosis but also to outline the extent of the tumor and to help plan the surgical approach."



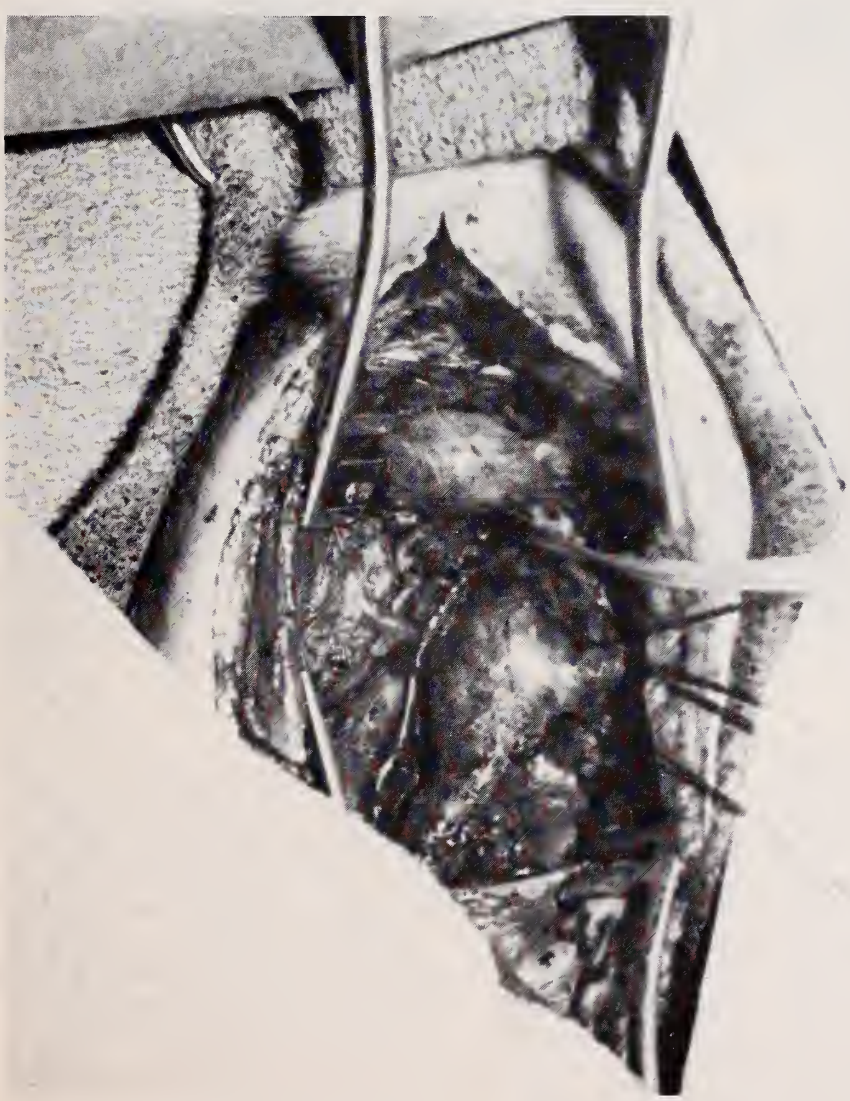
2. More posterior view of same bifurcation as figure 1 again showing tumor mass.

The carotid body is a tiny structure located within the adventitia of the common carotid artery at the bifurcation posteriorly. Carotid body chemodectomas are generally slow growing tumors that present as a mass in the neck. They are generally benign, although a few are malignant, demonstrating local recurrence or distant metastasis by lymphatic or hemotagenous spread. The malignant tumors tend to occur in younger patients usually less than 40 years of age. Most chemodectomas are unilateral, although 3-4% are said to be bilateral. There is a familial variety in which bilateral tumors are more common, occurring in 25% of patients.[2, 3] These tumors may secrete catecholamines, suggesting the possibility that some of these tumors might be related to the multiple endocrine adenomatosis syndromes.[4, 5, 6]

Generally, these tumors are asymptomatic and present as a mass in the neck. Although they may remain stable for years, most grow progressively larger and eventually cause symptoms by exerting pressure on adjacent structures. Pain in the neck or ear, hoarseness, dysphagia, Horner's Syndrome, and the carotid body syndrome have all been described. These symptoms are the result of pressure on adjacent structures including the vagus, hypoglossal, glossopharyn-



3. Duplex scan of normal left carotid bifurcation of case two. Note that bifurcation is at the bottom of the print.



4. Carotid body tumor in Case two.

geal, and sympathetic nerves. These tumors can also occlude the internal carotid artery causing stroke symptoms. The differential diagnosis should include metastatic tumor, carotid aneurysm, and branchial cleft cysts. Histologically, these tumors are characterized by rich cytoplasm and a highly vascular stroma. A diagnosis of malignancy usually depends more on the demonstration of metastasis or invasion than on cytologic characteristics.[6]

Diagnosis

The diagnosis of carotid body tumors is aided by a strong clinical suspicion in patients with appropriate neck masses. A definitive diagnosis of this tumor has depended on angiography which presents a classic picture. Carotid body tumors are very vascular, and a tumor blush at the carotid bifurcation is characteristic. There is usually wide splaying of the internal and external carotid arteries which may be very different from the contralateral artery. An arteriogram is certainly necessary prior to operative treatment of these tumors not only for diagnosis but also to outline the extent of the tumor and to help plan the surgical approach. A particular diagnostic problem to the vascular or head and neck surgeon has been the patient with the prominent carotid bulb. Often these patients tend to be young females with thin necks. A noninvasive study to help screen these patients would be useful and help avoid an unnecessary arteriogram.

"This tumor rarely invades the media of the artery, and a plane can be developed allowing resection of the tumor without sacrifice of the artery."

Radionuclide perfusion scanning with Tc99m pertechnetate has been

“Duplex scanning is a relatively new diagnostic modality which is frequently used in the diagnosis of carotid occlusive disease. It has the distinct advantages of being noninvasive, reproducible, and suitable for outpatient evaluation.”



5. Saphenous vein graft in place after resection of carotid body tumor in Case two.

described with some success.[7] Duplex scanning is a relatively new diagnostic modality which is frequently used in the diagnosis of carotid occlusive disease.[8] We have found this technique useful in screening patients with neck masses suspected of having carotid body tumors. High resolution B-mode scanning offers a distinct advantage over conventional doppler imaging of the carotid arteries. It allows accurate imaging of not only the vessel lumen but also the characteristics of the vessel wall.[9] A large carotid bulb can easily be distinguished from a solid tumor mass. Also, the configuration of the internal and external carotid arteries can be identified. Finally, comparing side to side will help identify asymmetry between the carotid bulbs also suggesting a pathologic process.

Our second patient was examined with this technique which suggested

a carotid body tumor subsequently confirmed by angiography (Figures 1, 2 and 3). Several patients since then have been studied and felt to not have carotid body tumors. Duplex scanning has the distinct advantages of being noninvasive, reproducible, and suitable for outpatient evaluation. It is also completely safe and therefore can be used for serial examinations. This seems to suggest that Duplex Scanning may be an ideal method of screening patients with suspected carotid body tumors.

Treatment

Surgical resection of carotid body tumors is the recommended treatment. Since these tumors are usually slow growing, this treatment may be tempered in elderly patients with compromised health. Generally, small tumors can be resected with low morbidity and good results.

The first report of a resection of a carotid body tumor was in 1880 by Riegner, although the patient did not survive. The first successful excision of a carotid body tumor was in 1889 by Albert.[2, 6] In the early years, the major problem associated with this surgery was the sacrifice of the internal carotid artery and the subsequent neurologic complications. If the tumor could be excised without sacrifice of the artery, chances for success were good.

Modern vascular surgery has greatly altered this approach. Subadventitial resection of smaller tumors has been advocated as the treatment of choice.[10, 11] This tumor rarely invades the media of the artery, and a plane can be developed allowing resection of the tumor without sacrifice of the artery. Larger tumors may require resection of the artery, and this can be done safely using an arterial shunt.[11] In both of the cases presented, subadventitial resections were attempted and found to be difficult. The bifurcations were subsequently resected and replaced with saphenous vein grafts (Figures 4 and 5). Intra arterial shunts were used, and there was no neurologic morbidity.

Morbidity and mortality rates for this operation without sacrifice of the internal carotid artery have been very acceptable, ranging from 0 to 5% in several collected series from the literature.[10, 12-19] This is a marked improvement from the mortality of 25% with ligation of the internal carotid artery.[15] If a subadventitial resection of this tumor is attempted, the surgeon should be prepared to replace the bifurcation; that is, be prepared to anticoagulate the patient, insert a shunt, and replace the artery with a graft. These tumors are extremely vascular, and the surgical dissection can be very tedious. Blood loss can be considerable. The main complications of this procedure are injuries to the many nerves in the operative field.[16] This is more common with the larger tumors. Fortunately, these neurologic deficits are frequently transient. Our first patient had a vocal cord palsy presumably from a vagus nerve injury which has not completely resolved. Injuries to other nerves including the hypoglossal nerve, mandibular branch of the facial nerve, and the sympathetic ganglion are all possible. Obviously, the most catastrophic complication is hemispheric stroke, which fortunately occurs rarely.

> ***"Carotid body tumors are very vascular, and a tumor blush at the carotid bifurcation is characteristic."***

Additional treatment for these tumors is controversial. Radiation therapy probably should be reserved for malignant or unresectable tumors.[12, 13] Large benign tumors that are incompletely resected probably require no additional treatment other than close observation, particularly in older patients.

Conclusions

Carotid body tumors are rare neoplasms that involve the bifurcation of the carotid artery. Though usually benign, these tumors can slowly enlarge and cause symptoms by compressing surrounding structures. These tumors are definitively diagnosed by angiography but may be identified by high resolution B-mode scanning. The treatment of choice is surgical excision with preservation of cerebral perfusion. The morbidity and mortality of this procedure should be low. Two patients are presented and general discussion given.

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FROM BAD TO WORSE

CHARLES D. HOLLIS, JR., M.D., JEFFREY T. NUGENT, M.D.

A new survey reveals how the liability insurance crisis continues to damage medical care delivery in Georgia.

WARNING: Excessive Medical Liability Costs May Be Hazardous To Your Health.

ONE YEAR AGO, the *Journal* reported on the harmful effects on Georgia health care of rapidly increasing liability insurance premiums and the growing number of liability lawsuits (JMAG, Dec. 1985, p. 818). Today, the situation has become still more serious. Greater numbers of established physicians are curtailing or closing their practices. Those embarking on careers in medicine are increasingly choosing low-risk areas of specialization. And patients throughout the state are encountering higher medical care costs and a lower availability of services.

This fall, the Medical Association of Georgia conducted its second annual statewide survey of physicians to determine professional responses to the crisis. The Association also surveyed resident physicians in hospitals around the state, to assess the impact of the crisis on the coming generation of doctors. Analysis of the results of these two surveys confirms the general trend of increased cost of and reduced access to medical care, and highlights particularly disturbing tendencies in certain specialties and in certain locations within the state.

Physician Survey Findings

Increasing cost of liability insurance

Of the 2782 survey respondents, 94.3% were covered by liability insurance. Approximately one half reported paying premiums this year of less than $10,000, but in certain specialties, the figures were markedly higher. Only 13.7% of OB/GYNs paid less than $20,000, for example while over 45% paid between $30,000 and $50,000. A total of 34.8% of neurosurgeons responding paid premiums of $50,000 or more. These figures, significantly higher than those of 1 year ago, amply demonstrate the increasing financial burdens which are leading physicians in high-risk specialties to restrict or discontinue their practices.

Discontinuation of procedures

Asked if within the last 3 years they had discontinued selected surgical procedures, 22.7% of neurosurgeons and 41.7% of general and plastic surgeons confirmed that they had done so. Of physicians in all specialties who had discontinued any procedures, 47.8% mentioned the cost of liability insurance, and 68.7% identified the threat of a lawsuit as factors in their decisions. Almost identical figures were obtained from those physicians who had discontinued or limited treatment of indigent patients, another disturbing trend with considerable implications for public policy.

Increased cost of health care to patients

Survey respondents were asked if the "liability climate" of the past 3 years (defensive medicine, additional diagnostic procedures, longer hospitalization) has raised the cost paid for health care by their patients. Overall, 79.4% replied that it had, with the largest number (40.9%) reporting an estimated increase of between 11 and 20%.

Involvement in claims and suits

Another significant finding of the survey was that 43% of the respond-

Dr. Hollis, an internist, is President of MAG Mutual Insurance Company, and Dr. Nugent, an orthopedic surgeon, is Chairman of MAG's Public Relations Committee.

Data Tabulating Service, Inc., was responsible for the compilation of these survey data.

ents had at some time been named in a professional liability claim or suit. The total figure included 60.3% of OB/GYN specialists, 61.7% of neurosurgeons, and 71.6% of orthopedists. For all specialties, of those who had been so named, a substantial majority (68.6%) indicated that the experience had altered their practice of medicine, with the most frequent response (reported by 56.9%) being ordering additional tests and procedures. Physicians in large communities (150,000 population and above) who had been in practice for 11-15 years were most likely to have been involved in a lawsuit.

Demographic trends

For the purposes of the survey, the state was divided into three regions — North Georgia including Atlanta, Middle Georgia, and South Georgia — and further analyzed according to community size. Responses obtained

"A total of 43% of the survey respondents had at some time been named in a professional liability claim or suit."

revealed the particularly negative impact of the liability crisis on small- to mid-sized communities, with 29.2% of physicians in such towns who had recently discontinued practice, citing the liability climate as the reason. Similarly, discontinuation of certain surgical procedures was most commonly found in small communities (10,000 population or fewer). In both cases, the rural south of the state was proportionately most affected.

Age of respondents as a factor

Responses to some of the survey questions indicated that the age of a physician was often important in determining reactions to the liability situation. The fact that younger doctors reported being more influenced by liability considerations serves to underline the threat to the future of our health care. Younger physicians had

Zell Miller On Tort Reform



One of the more prestigious elected officials to come out strongly in favor of tort reform legislation has been Lieutenant Governor Zell Miller. In a public statement made by Lt. Governor Miller on September 26, 1986, he said emphatically, "I advocate and will strongly support a comprehensive tort reform bill that will be introduced on the first day of the 1987 General Assembly." In fact, the Lt. Governor went one step further in his support by adding that he plans "to exert whatever influence and leverage I have to see that this bill becomes law."

Given these sentiments, it is clear that the Lieutenant Governor has, indeed, become another strong ally in the "war of words" that has characterized the tort reform battle in the Georgia legislature. He was not always so adamantly in favor of tort reform, however. He attributes grass roots public pressure as the force which motivated him to support tort reform efforts. According to the Lt. Governor, he "cannot recall when any single subject was the topic of more conversation or greater concern to more people than today's liability insurance crisis. It is a subject which, to one degree or another, affects the lives and pocketbooks of every person."

In his travels around the state and in his dealings with Georgians from all walks of life, the Lt. Governor discovered one major point of agreement on the liability crisis — among these varied groups the cost of liability insurance has become prohibitive, and corrective action is needed. He found that liability premiums for large and small businesses, and everyone performing services for other individuals, had increased astronomically. This had resulted in consumers paying higher prices for everything they bought and receiving reduced services for every dollar they spent. According to Lt. Governor Miller, "a crisis of major proportions" had arisen.

The bill the Lt. Governor plans to introduce will be known as Senate Bill No. 1 (SB 1) and will, according to Lt. Governor Miller, have "more than enough signatures on it to assure its passage." The bill will include the following provisions:

1. Cap on Non-Economic Loss
2. Evidence on Collateral Sources
3. Abolish Joint and Several Liability
4. Judicial Modification of Awards
5. Structured Settlements.

Explanations of these and additional reforms supported by MAG can be found elsewhere in this issue of the *Journal*.

more commonly discontinued some or all treatment of indigent patients during the last 3 years, for example, with the threat of a lawsuit followed by the cost of liability insurance cited as the major determinants in their decisions. A similar trend was demonstrated in figures relating to increasing costs of patient care: 90.3% of physicians under age 30 reported higher patient costs, declining progressively to 65.5% in the over-60 age group. Younger physicians also indicated clearly that involvement in a claim or suit had altered their practice of medicine. Of those under 30 who had been named in a claim or suit, 87.5% had followed this course of action, primarily by ordering additional diagnostic tests and procedures.

Would changing the laws make a difference?

Reinforcing the evidence of the various negative effects of the liability crisis, physicians in all specialties responded positively to the prospect of effective changes in the laws relating to liability. Of total survey respondents, 55.7% agreed that in such circumstances they would lower their fees and/or reinstate discontinued areas of practice. In OB/GYN, this figure rose to 73.8%; in orthopedics, to 68.8%. Such figures clearly indicate the beneficial impact proposed law reforms would likely have, as clearly as the rest of the evidence available demonstrates the continuing detrimental effects of the liability crisis in the absence of any such action.

Resident Survey Findings

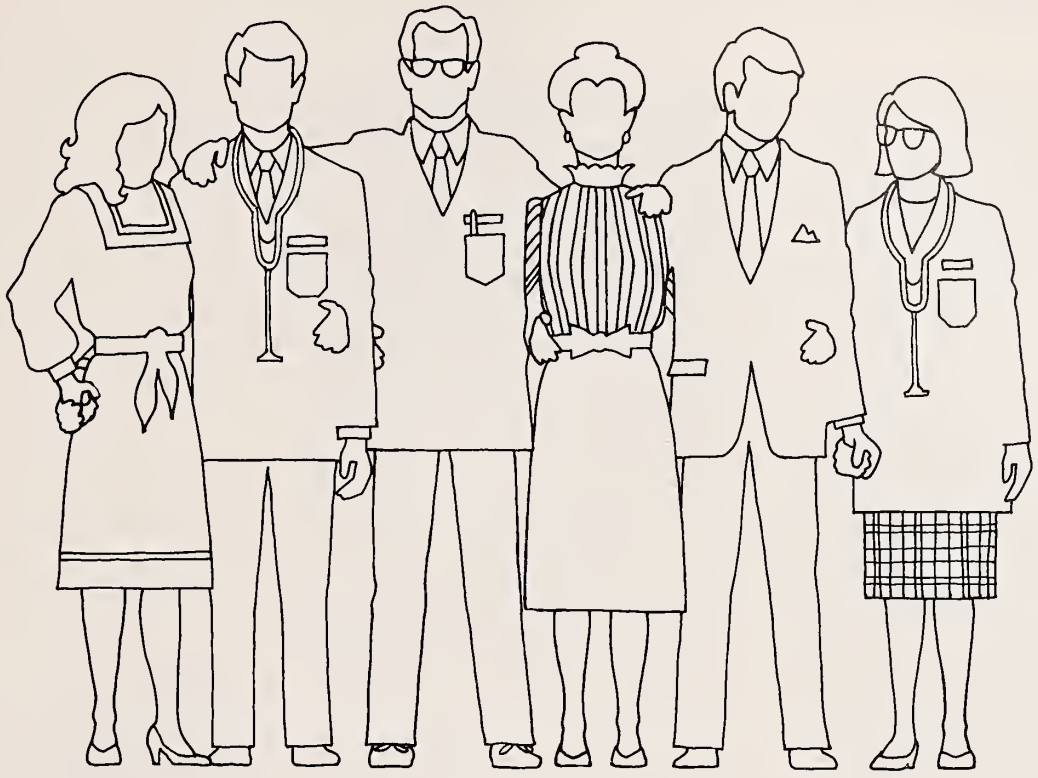
A total of 335 responses were obtained, primarily from residents in north and middle Georgia, and from mainly medium and large communities. This demographic breakdown serves to underscore the increasing shortage of physicians in rural and southern areas of Georgia, a situation that is being aggravated by the liability climate.

Among the resident physicians responding, a remarkable 36% of OB/GYN specialists had already been named in a claim or suit, and 30.4% of those in pediatrics and neonatal care stated that the liability situation had been a consideration in their choice of specialty. Similarly, in the OB/GYN field, liability considerations were found to have affected residents' choices of types of practice (53.3%) and choice of practice location (43.3%), with a further negative impact on rural communities.

> ***"Greater numbers of established physicians are curtailing or closing their practices. Those embarking on careers in medicine are choosing low-risk areas of specialization."***

Of residents who had been named in a claim or suit or had been called to give a deposition in a medical liability case, (as high as 66.7% of reespondents in cardiovascular medicine), it was again the OB/GYN specialists who were most affected, with two-thirds of respondents saying that the experience had altered their practice of medicine. Once again, as in the case of older physicians, the usual nature of the response was to increase the practice of defensive medicine, with the ordering of additional diagnostic tests and procedures by far the most common action. Such defensive responses are readily understandable in light of residents' financial constraints, with over 50% of survey respondents facing residency and medical school debts of more than $20,000 when they enter private practice.

Overall, the conclusions to be drawn in the case of Georgia's resident physicians are similar to those with their longer established colleagues. The liability situation is having a negative effect on the attitudes and activities of young physicians. As the future of health care in our state rests in their hands, the need for legal reforms to improve the liability climate becomes still more of an imperative.



YOU AND MALPRACTICE STRESS:

III. Two Spouses' Views

A Kernel of Social Value?

IT'S BEEN ABOUT 2 years now since my husband was sued for malpractice, and in a way, the wounds have healed. Time takes care of some things. But in other ways we still feel the impact of that experience every day. Our lives are permeated with the knowledge that if it happened once, it could happen again, if not today, then tomorrow, or next week, or next year. Statistically, in fact, the chances are he will be sued again.

Certain things I want to make clear from the outset. First of all, we won the suit. The jury found for the defendant, my husband. Second, the suit was close to frivolous. While positioning the patient's head prior to pituitary surgery, he had lacerated her scalp with the pin on the clamp. After the surgery, he explained to her why she had stitches on her head. He had probed into the very center of her brain, and she came out with a scratch on her head. During the trial, a perfectly healthy woman sat at the plaintiff's table. Why did she do it? We can only speculate: opportunism perhaps, a hungry lawyer, a passive willingness to exploit an existing system.

Several years elapsed between the surgery, the legal action, and the trial. Ernie spent countless hours gathering the information that he needed to defend himself, deposing before the other side's attorneys, taking depositions from the other side's so-called expert witnesses (not one board-certified physician among them), answering correspondence, and so on. From time to time the charges against him changed — for a while they were

calling it assault. (Luckily we didn't have to take that one too seriously.) At one point, they offered to settle out of court for a nominal sum, but the offer was refused. Ernie was angry, annoyed, depressed, and sometimes amused and disbelieving. He was caught in a machine. He was being punished, and he didn't deserve it.

At last the day of the trial arrived. I was excited. I knew that finally my husband would be vindicated, would have his day in court. And at first, it seemed that way. The jury appeared alert and well-educated. Our witness was the fine endocrinologist who had referred the patient to Ernie. On the stand, Ernie was reasonable, articulate, and engaging. A fact about him which very few people know came out: that he had scored 100% on his boards, the only person in the world who had ever accomplished that feat up to that time. I felt good. Surely everyone could see the truth.

Then came the closing arguments. The gloves were off, the rules of evidence suspended. The plaintiff's attorney could say anything he wanted. He claimed that Ernie with his brains, his talent, and his "ingratiating ways" had intimidated the patient, coerced her into having the operation. He took Ernie's most valued prize, his neurosurgery boards, and taunted him with it. It was like having someone slap you in the face with your own Olympic gold medal, over and over again — humiliating.

Waiting for the jury to return their verdict was the next ordeal. That hour, or 45 minutes, or whatever it was, seemed interminable. A jury of our peers had been given the power to decide whether my dedicated, hard-working doctor husband had been negligent or not. To pass the time we chatted with our lawyers, told stories, and held hands. I don't know whose palm was sweating, his or mine. Both, I guess.

As I said, we won. The years of worrying and waiting and being angry and scared were over. But there was no great sense of triumph, just the wastefulness, degradation, and sheer senselessness of the whole procedure.

For the moment, Ernie is not being sued. But we know it's probably only a matter of time. And so when the emergency room calls in the middle of the night with a trauma case, we wonder if the patient will sue. And when Ernie examines a new patient in his office and tries to decide whether to operate or not, he wonders then too.

As a boy, he never wanted to be anything except a doctor. But now every time his insurance bill goes up, his commitment to being a physician in Georgia goes down. Recently Ernie told a group of lawyers that we may be seeing the last generation of high risk practitioners in Georgia. The doctor who made a perfect score on his boards wonders if he chose the right profession. These are painful realizations. In addition to all the time and money that were spent, we've suffered an intangible loss.

The Georgia Trial Lawyers' Association says the consumer must be protected. And of course, actual malpractice and negligence do occasionally occur. Somewhere in all of this there's a kernel of social value, I suppose. Nevertheless, something one of the lawyers said to my husband several years ago seems to sum it all up: "Ernest, you have been wronged."

Marilyn Montgomery, Ph.D.
Auxiliary to the MAG

"The years of worrying and waiting and being angry and scared were over. But there was no great sense of triumph, just the wastefulness, degradation, and sheer senselessness of the whole procedure."

Dr. Montgomery is Administrator of the Employee Counseling Service, U.S. Department of Health & Human Services, Atlanta, Georgia. Her husband is Ernest C. Fokes, Jr., M.D.

A Doctor's Lawsuit — Behind the Scenes

THE WORD scenes is used in the title to emphasize the fact that the entire proceedings of the lawsuit against my husband was like a dramatization. The setting was the local county courthouse, the director was the judge, the audience was the jury, and the main characters were the lawyers. The script dealt with the attempt to undermine the doctor's respected reputation in the community, and to find fault with his work, his lifeblood.

Where do I begin to describe the multitude of feelings that went into three of the most traumatic days of our marriage? Let me go back, first of all, and give a brief history of the case. The lawsuit had been pending for several years before the actual trial. Neither my husband nor I believed it would ever come to court until it was upon us. It seemed like such a simple case; a ruptured appendix, it happens to every surgeon occasionally. The doctor had weighed all the possibilities, and had taken the appropriate action. How could anyone question his waiting to be more positive of his outcome, before he operated? And yet, a lawyer did find fault with his procedure, and thought it questionable enough to convince his client that he could win a lawsuit against the doctor.

The tension began building about a month before the trial, as it began to dawn on us that this lawsuit was a reality. The doctor spent whole days with lawyers going over the case history taken several years before, giving depositions, and doing research on the particular case. Finding the hours for this work took large chunks of his personal and professional time. The pressure seemed worse to me than years ago, when he prepared for examinations to become a Board certified surgeon.

A few days before the trial was to begin, I was told what my role would be in this drama. My husband's lawyer wanted me to be present in the courtroom during the proceedings. I was told by him to dress in a simple manner, no expensive jewelry, nothing that looked like a "rich doctor's wife." As simplicity is my style in dress anyway, this request was not difficult for me to comply with.

As I walked into the courtroom on the first day of the trial, I could feel the excitement and tension building as the curtain was about to go up on Act I. I will not go into the details of the trial, as that is another story in itself. Only our reactions to the proceedings will be presented here. I realized early on the first day that I did not want to go through these days of the trial alone. My husband belonged to his lawyers, for the most part, and was inaccessible to me. In any case, he was in no state to reassure me. He was the one who needed my reassurance and support. The person I most wanted to be with me was my husband's partner's wife. We are like family in many ways, as neither of us have family in our community. I felt that she, more than any other person, would understand the situation best, because of the kind of person she is, because she's a doctor's wife, and because the whole practice seemed under attack. She came the second day and stayed with me throughout the trial.

My emotions were close to the surface every moment of those 3 long days, which seemed like an eternity. As I watched this drama unfold, I felt anger and fright. There was anger at the lawyers, who had brought this suit upon us. More anger surfaced, as they accused my husband of neglect, when all he's ever wanted and tried to do was the very best for his patients. Frightening thoughts also filled my mind constantly. What if the jury believed there was an error in my husband's judgment? How would that affect him emotionally? How would that affect his practice?

Our home life was like a dream during this time. We were obsessed with the trial and could think of little else. We weren't with the children much during these days. When we were, the preoccupation with the trial made family matters seem far away. Sleep came only in bits and pieces and naturally added to our exhaustion from the experience.

As the trial neared its conclusion, the emotional tension closed in on my husband. He was on the stand, explaining the operation to the jury in great detail. He had just finished with, "a sponge count had been taken, not that I expected to be here today." Then he broke down, and immediately a recess was called by the judge. I held my tears back, as I felt that I needed to hold him together at this time. I had never seen him more vulnerable in all our married years. He could not have done anything more believable to convince the jury of his sincerity than this emotional overflow.

Near the end of the third day, the jury was sequestered to deliberate on their verdict. The lawyers were beginning to relax, as their part of the drama had come to a close. Our tension was intense, as we awaited the outcome of the script that would affect our lives so deeply. After about 30 minutes, which seemed like hours to us, the jury returned with a verdict in my husband's favor. They decided there was no negligence in his care of the patient. My husband's lawyers immediately turned and congratulated each other on their success. There was a bonus for their victory. Only then did they turn to us, but we felt no victory. Relief and exhaustion were closest to the surface. Under these feelings was anger that all this had come about in the first place because one patient and then one lawyer had found fault with a procedure they did not understand.

The lawyers on both sides packed up their papers and books as they discussed other cases pending in a friendly manner, just as if it were all in a day's work. As we made for the exit, the opposing lawyer approached us, smiling broadly, and said, "No hard feelings, doctor!"

Anonymous member
Auxiliary to the MAG

Tobacco and Health: The Role of the Physician

John R. Duttenhaver, M.D.

EACH YEAR new data are presented linking health risk to smoking and tobacco usage. Lung cancer, heart disease, lung disease, and other medical consequences of tobacco use are the preventable epidemic facing the American public. Lung cancer deaths among males began to increase in the 1930s as men converted from other forms of tobacco use to cigarette smoking before the turn of the century. Young women began smoking intensively during World War II and now represent a population of individuals at increased risks for tobacco-related illness. Lung cancer will cause 120,000 deaths in the United States this year and has long been the leading cause of cancer deaths in American males. In 1985, the death rate from lung cancer in females surpassed the death rate from breast cancer, to make lung cancer the leading cause of cancer mortality in women. According to a 1979 study, 13% of girls between the ages of 12 and 18 are smokers, a rate two percent higher than teenage boys. The National Institutes of Health has studied the frequency of use of smokeless tobacco (chewing tobacco and snuff) and found that 16% of males between the ages of 12 and 17 had used some form of smokeless tobacco within the past year, and approximately one-third used it one or more times per week. Oral cavity cancer will affect 25,000 individuals in 1986 and is a disease that is almost exclusively limited to persons who use tobacco, particularly in the presence of alcohol abuse.

The cancer risk is highest for those who begin using tobacco at an early age, and there is perilous correlation between years at risk and tobacco dose exposure. Those who start using tobacco early tend to become heavy abusers and use tobacco for the longest number of years.

"Studies have shown that intervention by a physician can significantly increase the percent of success among smokers who are trying to quit."

The responsibilities of the medical profession are clear. We must support intervention, but recognize the difficulties that confirmed tobacco users confront when they try to quit. Although 80 percent of tobacco users acknowledge that tobacco is a health risk, only one-third of persons attempting to give up the tobacco habit succeed. The addiction of nicotine is amazingly strong. Studies have shown that intervention by a physician can significantly increase the percent of success among smokers who are trying to quit.

The health professionals who are best able to assist their smoking patients are those who are armed with the facts regarding tobacco health risks relative to cancer, heart disease, strokes, pregnancy and infant health, bronchopulmonary disease, and peptic ulcer disease. Adequate knowledge regarding the prescriptive value of nicotine gum can be a helpful adjunct in helping addicted patients break the physical dependence on nicotine.

By far the best solution by physicians is to contribute to the prevention of and discourage the use of smokeless tobacco and smoking. Studies show that prevention will not be achieved by confronting teenagers with fear tactics and gloomy statistics. The threat of a lung cancer or chronic pulmonary disease 40 years from now is too remote to deter a 12-year-old. Prevention in adolescence must speak directly to the special concerns of early teens, such as self esteem and peer pressure.

Physicians can play an influential role in the prevention of tobacco usage among the youth. They have regular opportunities to reenforce an anti-tobacco message during patient visits. M.D.s should convey the importance of tobacco abstinence and reinforce this with posters in the reception and exam rooms. Physicans should also assist in educating parents to help deter adolescents from smoking.

A smoke free society by the year 2000 is a goal in the best interest of our public health. Physicians can and should play a key role in both intervention among tobacco users and prevention in young teenagers.

Dr. Duttenhaver is a Radiation Oncologist, Memorial Medical Center, P.O. Box 23089, Savannah, GA 31403. Send reprint requests to him.

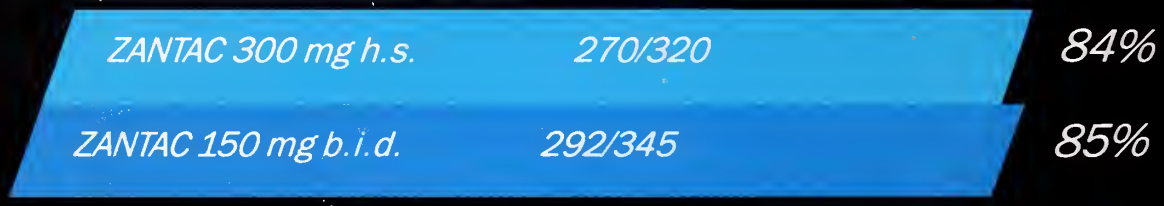
This paper was sponsored by the Georgia Division of the American Cancer Society.


CONTROL
ACID RAIN
with once-a-night
h.s. therapy for active
duodenal ulcers

Only one tablet at bedtime

Controls nocturnal acid to relieve pain and heal duodenal ulcers

Heals active duodenal ulcers after 4 weeks in most patients*[1]



In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.[1]

Zantac® 300

ranitidine HCl/Glaxo 300 mg tablets

Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications which decrease gastric acidity are administered.



**It is not known exactly how much acid inhibition is needed to heal ulcers.*

Glaxo / ROCHE

See next page for references and Brief Summary of Product Information.

IN ACTIVE DUODENAL ULCERS

Once-a-night h.s. therapy controls acid rain

Zantac® 300
ranitidine HCl/Glaxo 300 mg tablets

References: 1. Data available on request, Glaxo Inc. **2.** Ireland A, Colin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2:274-275. **3.** Colin-Jones DG, Ireland A, Gear P, et al: Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary.

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy. 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosage is 150 mg at bedtime.

Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome): The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosage is 150 mg twice a day.

GERD: The current recommended adult oral dosage is 150 mg twice a day.

See full prescribing information for dosage adjustment for patients with impaired renal function.

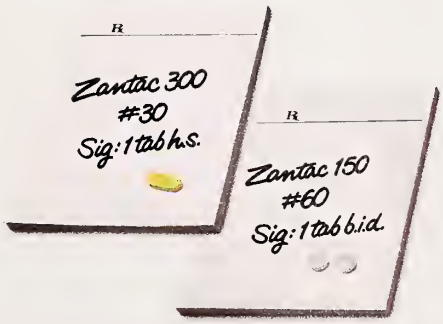
HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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Two effective regimens to treat active duodenal ulcers:



Glaxo
Glaxo Inc.
Research Triangle Park, NC 27709

The Diabetes Center

At Scottish Rite Children's Hospital

1001 Johnson Ferry Road, NE, Atlanta, Georgia 30363
252-0753

The Diabetes Center provides a hospital-based comprehensive program for infants, children and young adults who have insulin dependent diabetes mellitus. Our specialists, through a multi-disciplinary team approach, assist patients from birth to 18 years of age to adapt emotionally and physically in the self-management of their disease.

Structured activities include:

- Diabetes education (or re-education) for patient and family
- Educational games and audio/visual presentations
- Simulated experiences (role-playing) with peers
- Individualized exercise program
- Intensive dietary instruction
- Administration and regulation of insulin dosage
- Techniques of blood glucose self-monitoring
- Evening educational courses for relatives and other caregivers

Medical Director:
Robert M. Schultz, M.D.
Pediatric internship, residency and fellowship
in Pediatric Endocrinology and Diabetes
at Children's Hospital, Buffalo, NY

Co-Medical Director:
Stephen W. Anderson, M.D.
Pediatric internship, residency and fellowship
in Pediatric Endocrinology and Diabetes
at Children's Hospital, Buffalo, NY

Staff includes a nurse coordinator, clinical nurse educator, recreational exercise therapist, dietitian, social worker/counselor and 20 registered nurses. Patients can be referred from primary care physicians or agencies. To make an appointment, call the Center at Scottish Rite Children's Hospital: 252-0753.

I think some of my patients may be able to benefit from The Diabetes Center at Scottish Rite Children's Hospital.

Please have your nurse educator contact me regarding:
☐ Psychological Consult ☐ Recreational/Physical Therapy
☐ Parent Support Group ☐ Nutrition
☐ I would like patient literature when available

Doctor _____
Address _____
City _____ Zip _____
State _____
Phone _____

Release of Medical Records Without Patient Authorization?

Richard Greene

"A major potential problem with this new statute occurs when the physician's office releases the requested medical records without waiting the required 10 days to permit the patient to file an objection with the court."

A NEW GEORGIA statute permits and sometimes even requires the release of a patient's medical records to an opposing attorney *without* a written release from the patient. *The Official Code of Georgia Annotated (O.C.G.A. 9-11-34)* was amended by the 1986 General Assembly to expedite and unencumber the legal "discovery" process in lawsuit. This new amendment makes things easier for the attorneys but creates a new potential problem area for physicians. This article will point out the major pitfalls for physicians and how they can be avoided.

When a person or entity (plaintiff) files a lawsuit against someone (defendant), especially when the medical condition of the plaintiff is at issue, the courts have held that the defendant has a legal right to "discover" relevant aspects of that person's past medical history. In an attempt to speed up and simplify the judicial process, the law was changed to permit discovery of a patient's medical records by opposing counsel by merely sending the physician a legal "notice to produce" those records. The new statute clearly permits release of those medical records without a written authorization if certain conditions are met by the attorney requesting the information and if no objections are filed by the patient, physician, or other interested party.

Mr. Greene is MAG's General Counsel. Direct inquiries to him at 938 Peachtree St., Atlanta, GA 30309; PH: 404-876-7535, or WATS in Georgia, 800-282-0224.

O.C.G.A. 9-11-34 sets out the general standards and conditions for the production of documents, records, right to inspect, test, sample or even enter upon the lands of another. *A new subparagraph (c) sets out a unique set of guidelines to be followed by physicians and other health care providers.* Since the single most important issue involving medical records is confidentiality, this new law must be followed closely and "to the letter." This new subparagraph is reproduced in the nearby box for future reference. Cut it out and keep it handy when answering requests for medical records.

The first requirement of *O.C.G.A. 9-11-34 (c) (2)* puts the burden on the requesting attorney to not only serve the physician with a copy of the request for production of the records but also obligates that attorney to serve a copy of the request upon *all* parties of record. The physician, upon receipt of this formal, legal request for the production of medical records should *not* provide the information immediately. The statute specifically allows the physician or any of the parties to file an objection to the production of the records within 10 days of the request. If the physician feels that there are materials that should not be released, such as psychiatric information, he has the right to file his own objection with the court; however, the better course to take would be to contact the patient's attorney and inquire if the attorney will either object or provide the physician with a written release. Always try to make the patient's

attorney file the objection, because if the physician's attorney files the objection and loses, the physician may be subject to paying the other sides attorney's fees and court costs. The preferred action in any case is to get a written release from the patient.

"This article points out the major pitfalls for physicians of a new statute and how they can be avoided."

A major potential problem area with this new statute occurs when the physician's office releases the requested medical records without waiting the required 10 days to permit the patient to file an objection with the court. Physicians sometimes delegate to a staff member the responsibility of mailing records to various requesting attorneys. They must be cautioned not to do so without a specific release to that particular attorney or without waiting the required 10 days. They should hold the files for at least 10 days before sending the records. It is probably permissible to wait 15 days to be sure that an objection was not delayed in the mail. At the same time, the physician should contact the patient's attorney to inquire if the attorney or patient plans to object to the release and to also seek a written authorization from the patient. The law also provides that if no objection is filed within the 10 days, then the physician "shall promptly comply" with the notice to produce the medical records.

Cut this box out and save for future reference

9-11-34. Production of documents and things and entry upon land for inspection and other purposes.

(c) Applicability to nonparties.
(2) This Code section shall also be applicable with respect to discovery against a nonparty who is a practitioner of the healing arts or a hospital or health care facility, including those operated by an agency or bureau of the state or other governmental unit. Where such a request is directed to such a nonparty, a copy of the request shall be served upon all parties of record; or, upon notice, the party desiring such discovery may proceed by taking the deposition of the person, firm, or corporation on oral examination or upon written questions under Code Section 9-11-30 or 9-11-31. The nonparty or any party may file an objection with the court in which the action is pending and shall serve a copy of such objection on the non-party to whom the request is directed, who shall not furnish the requested materials until further order of the court, and on all other parties to the action. Upon the filing of such objection, the party desiring such discovery may move for an order under paragraph (a) of Code Section 9-11-37 to compel discovery and, if he shall make a showing of good cause to support his motion, discovery shall be allowed. If no objection is filed within ten days of the request, the nonparty to whom the request is directed shall promptly comply therewith.

Fetal Echocardiography: Diagnosis and Management of Fetal Arrhythmias

Ramon Castillo, M.D., Frederick W. Arensman, M.D., Gerald B. Holzman, M.D., Laurence D. Devoe, M.D., Sarah Martin, R.D.M.S., Dorothy Geist, R.D.M.S., Wesley Covitz, M.D.

Introduction

A SIGNIFICANT NUMBER of fetuses experience variations in heart rate and rhythm.[1] Arrhythmias are recognized with increasing frequency as antepartum diagnostic methods that focus on the fetal heart are more commonly employed. The prognosis for a fetus with an arrhythmia depends on factors such as the type of arrhythmia, coexistence of structural anomalies, and evidence of heart failure.[2] The aims of this paper are to review the pathophysiology of the most common fetal arrhythmias, available diagnostic methods, and therapeutic options.

Types of Arrhythmias

Sinus tachycardia is defined as a heart rate over 160 beats per minute in which there is normal conduction of the impulses originating in the sinoatrial node.[3] The R-R interval is not constant, although at higher rates (>160) variability is significantly reduced. The most common etiologies for this type of arrhythmia include fetal hypoxemia, maternal and/or fetal infection, maternal fever, or medications such as Ritodrine.[2]

From the Departments of Obstetrics and Gynecology and Pediatric Cardiology, Medical College of Georgia, Augusta, GA. Send reprint requests to Dr. Castillo, Section of Maternal-Fetal Medicine, Dept. of Ob/Gyn, Medical College of Georgia, Augusta, GA 30912.

This paper was sponsored by the Georgia Affiliate of the American Heart Association.

Sinus bradycardia is defined as a heart rate less than 120 beats per minute in which there is normal conduction of the impulses originating from the sinoatrial node.[3] This arrhythmia most often results from a baroreceptor response secondary to head or cord compression. Other causes include fetal hypoxia and administration of maternal drugs such as local anesthetics or beta blockers.[2]

"A review of the pathophysiology of the most common fetal arrhythmias, available diagnostic methods, and therapeutic options."

Premature atrial and ventricular contractions are disorders of increased automaticity which have an incidence of up to 10% in fetuses during labor.[1, 2] Impulses originate in an ectopic location. The cause of this type of arrhythmia is unknown. In the absence of structural cardiac disease, over 90% of fetuses will have sinus rhythm within 1 week after birth.[4]

Supraventricular tachycardia is associated with a heart rate, generally over 200 beats per minute, with impulses that originate outside of the sinoatrial node.[2] In contrast to sinus tachycardia, the R-R interval is usually constant. This arrhythmia can be paroxysmal or continuous. Congenital anomalies have been described in up to 10% of affected fetuses.[2] There is also increased risk for the development of intrauterine heart failure and the subsequent appearance of fetal nonimmune hydrops.[5]

In atrial flutter and fibrillation, the atrial rate may fluctuate between 250 and 460 beats per minute.[2] Varying degrees of atrioventricular block may be present, resulting in ventricular rates of 60 to 200 beats per minute. Two types of atrial flutter in infancy have been described by Rodriguez-Coronel, et al. and later discussed by Moller.[6] These are Type I, which is congenital or appears within the first week of life, and Type II, which is paroxysmal, appearing later in life. Type I may occur in utero and is generally more responsive to medical therapy. There is, however, a higher association with congenital abnormalities. Both atrial flutter and fibrillation can cause intrauterine heart failure and hydrops fetalis. When these arrhythmias appear together, medical attempts at cardioversion may be ineffective.[5]

Three types of atrioventricular block have been described. First degree block has not been described in a fetus and will not be discussed here. Second degree or incomplete heart block implies that some of the impulses generated in the atria will be

conducted.[2] This block often coexists with other conditions, such as supraventricular tachycardia, atrial flutter, or atrial fibrillation. The kind of block, i.e. 3 to 1, 4 to 1, etc., will determine the rate at which the ventricle contracts. Second degree block may be protective when atrial rates are high.

Third degree or complete heart block implies that there is no conduction between the atrium and the ventricles. This condition is associated with a high incidence of structural heart abnormalities (up to 40%) and consequently a high mortality rate is reported.[4] There is a strong association between complete heart block and maternal connective tissue disorders such as systemic lupus erythematosis. This arrhythmia, in pregnancies of patients with connective tissue disease, is thought to be due to transplacental passage of IgG antibodies directed towards cardiac tissue.[7] Whenever congenital heart block is identified, appropriate diagnostic studies should be performed on the mother.

Diagnosis

The need to make an early and accurate diagnosis is paramount to achieving a satisfactory outcome in pregnancies complicated by fetal arrhythmia. Abdominal auscultation should be performed for at least 30 seconds to 1 minute on each visit, since many arrhythmias are paroxysmal. Conditions associated with intrauterine arrhythmia, such as polyhydramnios and decreased fetal movement, should be evaluated thoroughly. In pregnancies complicated by diabetes, Rh sensitization and connective tissue disorders, a complete fetal evaluation is necessary since the incidence of fetal arrhythmias is increased. Finally, a history of drug or teratogenic exposure or a strong family history of congenital heart disease mandates a complete cardiac evaluation due to the increased risk of cardiac anomalies. Current methods for diagnosis and evaluation can be divided into two groups: (1) heart rate analysis through electrocardiography; (2) ultrasound evaluation of the fetal heart.

The fetal electrocardiogram can be performed in two ways. In the antepartum period, a fetal electrocardiogram can be obtained with the placement of electrodes on the maternal abdomen. Since the duration of the fetal QRS complex is between .04 and .06 seconds, in contrast to the maternal QRS which is greater than .08 seconds, a distinction can be made between the maternal and fetal heart rate. Unfortunately, drawbacks include the inability to document atrial contractions and a high failure rate in obtaining an adequate signal. During the intrapartum period, an accurate electrocardiogram can be achieved with the placement of a fetal scalp electrode.

Real time ultrasound provides a two-dimensional view of heart structures, permitting the identification of structural abnormalities. Each chamber can be visualized as it contracts and by recording the pattern, an analysis of the arrhythmia present can be performed.

“The need to make an early and accurate diagnosis is paramount to achieving a satisfactory outcome in pregnancies complicated by fetal arrhythmia.”

The most common and presently the most accurate means of evaluating cardiac arrhythmias is the real time directed M-mode echocardiogram.[9] This technique permits a detailed characterization of the arrhythmia present since the atrioventricular relationship can be established. The most common approach is to obtain a four-chamber view of the fetal heart and then place the ultrasound cursor parallel to the interventricular septum.

The newest modality is Doppler ultrasound. This technique utilizes an

"The most common and presently the most accurate means of evaluating cardiac arrhythmias is the real time directed M-mode echocardiogram. . . . The newest modality is Doppler ultrasound."

analysis of frequency changes as ultrasound waves strike a structure in motion. Currently, this technique is used to quantify blood velocity through heart chambers and great arteries. It is anticipated that its use will increase as the technique is refined and diagnostic expertise increases.

Management

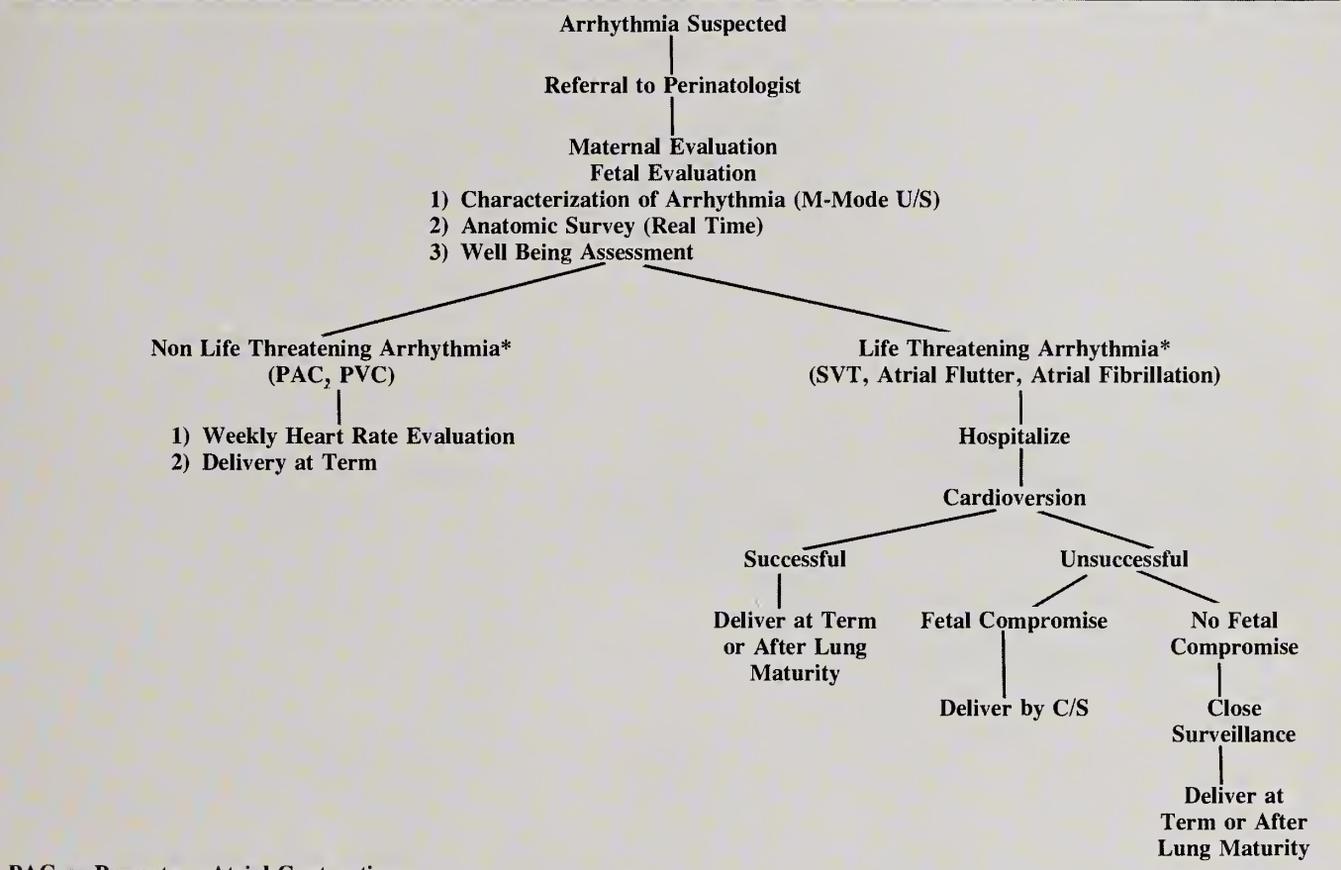
Following diagnosis of an arrhythmia in the antepartum period, a detailed ultrasound examination is performed (Table I). The heart is examined for evidence of structural abnormalities and signs of heart failure, such as pericardial or pleural effusions and chamber enlargement. Characterization of the arrhythmia is performed with the use of the real time derived M-mode. If the arrhythmia is isolated ectopy, sinus bradycardia, or congenital block and there is no evidence of fetal compromise, weekly examinations are performed for early recognition of fetal decompensation. Premature atrial and ventricular contractions, the most frequent arrhythmias seen during antepartum fetal evaluation, are not associated with hypoxia, fetal distress, or adverse perinatal outcome. Follow up is indicated, however, since a relationship has been suggested between premature atrial contractions and the development of supraventricular tachycardia.[5]

If the arrhythmia is either supraventricular tachycardia, atrial flutter, or atrial fibrillation, the mother is hospitalized and pharmacologic cardioversion is attempted. Drugs used for this purpose include digoxin, propranolol, verapamil, procainamide, and quinidine. Digoxin is the most frequently used drug for this purpose, and its pharmacodynamics are well documented. To date, no teratogenic effects have been described. This drug crosses the placenta freely, and levels in the fetus are said to be approximately 80% of those in the mother.[10] For the purposes of intrauterine cardioversion, maternal digoxin levels should be measured frequently and kept between 1.5 to 2.0 micrograms per liter. Treatment failures may be related to either inadequate drug levels or inadequate fetal myocardial response.[5] If cardioversion is successful, the pregnancy should be allowed to reach term, when vaginal delivery is attempted. When cardioversion is unsatisfactory, close follow up with methods that do not rely entirely on the fetal heart rate, i.e., biophysical profile, are used. As soon as lung maturity is established and the patient is suitable for induction, a vaginal delivery is attempted. If fetal decompensation is found as demonstrated by 1) cardiac enlargement, 2) development or progression of effusions, and 3) abnormal antepartum test, interruption of the pregnancy is considered.

"Scalp pH determinations should be performed if there is suspicion of fetal distress or when a baseline value is desired due to difficulty in heart rate interpretation."

When the arrhythmia is detected in the intrapartum period or the fetus with an established diagnosis reaches this stage and there is no evidence of fetal compromise, a vaginal delivery is allowed. However, amniotomy is performed as soon as possible since placement of the scalp electrode will provide the best method for fetal

Table 1



PAC = Premature Atrial Contraction
PVC = Premature Ventricular Contraction
SVT = Supraventricular Tachycardia

*Management scheme for fetuses with cardiac arrhythmias, only; if other congenital abnormalities are present, this protocol may be altered for the individual condition.

assessment. Scalp pH determinations should be performed if there is suspicion of fetal distress or when a baseline value is desired due to difficulty in heart rate interpretation. In fetuses with evidence of heart failure, labor is usually poorly tolerated and cesarean section is the method of choice for delivery.

In summary, good perinatal outcome will be achieved through early recognition and treatment of significant arrhythmias. Pharmacologic cardioversion is often successful, and premature deliveries as well as cesarean section may not be necessary. The fetus will benefit from a combined approach provided by the obstetrician, pediatric cardiologist, sonologist, and neonatologist in an institution capable of handling complex cases.

Acknowledgement

The author wishes to acknowledge the help of Elaine Dowden in the typing of this manuscript.

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Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

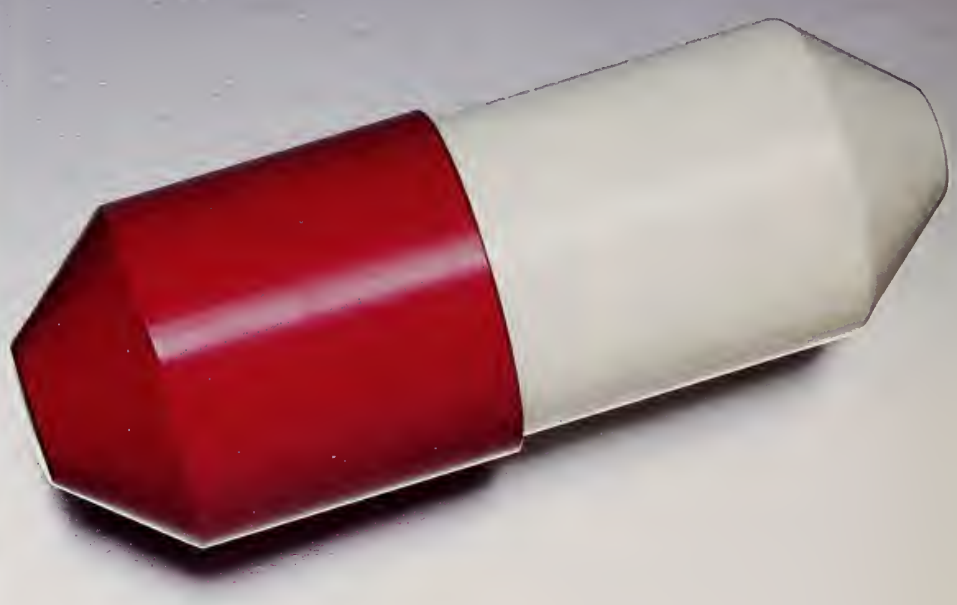
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The Award was established by the AMA House of Delegates in 1968 "to recognize, encourage, and support physicians who participate regularly in continuing medical education and to emphasize the importance of developing more meaningful continuing medical education opportunities for physicians." A minimum of 150 credit hours of CME must be earned over a 3-year period to qualify for the Award. The hours may include such activities as conferences, residencies, teaching, writing, private reading, listening to cassettes, home study courses, consultation, and peer review; at least 60 of the hours, however, must be from formal CME programs sponsored or co-sponsored for Category I credit by organizations accredited for these activities.

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Oser, Eric R., Orthoped. Surg.— Med. Assoc. Atl.
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PERSONALS

Second District

Albany obstetrician, **Frank F. Middleton, M.D.,** was named vice chairman of MAG's Board of Directors.

J. R. B. Hutchinson, M.D., of Atlanta, was chosen President-Elect at the annual meeting of the American Academy of Otolaryngic Allergy, Inc.

Fifth District

Charlie Rogers, M.D., of Atlanta, has been appointed new chief of staff at Northside Hospital.

William W. Moore, Jr., M.D., FACS, a neurosurgeon from Atlanta, was elected President of the Southern Medical Association at its 80th Annual Scientific Assembly. Dr. Moore is a former President of the Fulton County Medical Society and MAG.

Seventh District

Willard P. Carson, M.D., a general surgeon in Dalton, was elected president of the medical staff of Hamilton Medical Center.

Dale M. Kristle, M.D., a specialist in obstetrics and gynecology, has been named a member of the active medical staff of Hamilton Medical Center.

DEATHS

James Thomas King, M.D., of Atlanta, died last July. He had been in solo practice of otolaryngology in Atlanta since 1945.



William W. Moore, Jr., M.D., (right) a neurosurgeon from Atlanta, is the new President of the Southern Medical Association.

Dr. King received his medical degree from The University of Georgia School of Medicine in 1936. He had been Assistant Professor of Otolaryngology and Assistant Professor of Surgery at Emory University since 1946 and 1965, respectively. Dr. King was a member of several professional organizations and had been secretary and/or president of most of those he joined. He was also on the staff of several Atlanta hospitals.

Herbert W. Burton, M.D., of Atlanta, a retired internist, died of a heart attack at the age of 71.

Dr. Burton was on the staff at Crawford Long Hospital from 1951 until he retired in 1983. Dr. Burton received his medical degree in 1941 from the Medical College of Virginia in Richmond.

William George Chambless, M.D., died at his home in Pine Mountain Valley at the age of 67.

Dr. Chambless received his medical degree from the Medical College of Georgia in Augusta as did his wife, Miriam Walker. The Chamblesses interned at University of Alabama Hospital in Birmingham. Poor health forced Dr. Chambless to retire in 1981. In 1985, the University of Georgia honored him with its Alumni Regional Committee Helpers Award for "service to humanity."

Dr. Chambless was a diplomate of the American Board of Family Physicians. He was a member and deacon of Hamilton Baptist Church. Survivors include his wife, two daughters, two sons, a brother, and a grandchild.

ERRATUM

Please make the following corrections in the article by Dr. Rheudasil, et al., "True Pancreatic Cysts: A Review," published on pp. 534-37 of the September, 1986, *Journal:*

In the second paragraph under the **Discussion** section, the *three* studies referred to in the first sentence should be changed to *four,* "Currently, the *four* studies most useful. . . ."

Under the **Congenital Cysts** section, the last two sentences of the first paragraph should correctly read, "Our case . . .has been demonstrated *preoperatively. Excision* of these cysts. . . . " In the third paragraph, correct the last sentence to read, "While these patients may suffer from recurrent pancreatitis, they *uncommonly* require surgery. . . ."

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E — Editorial
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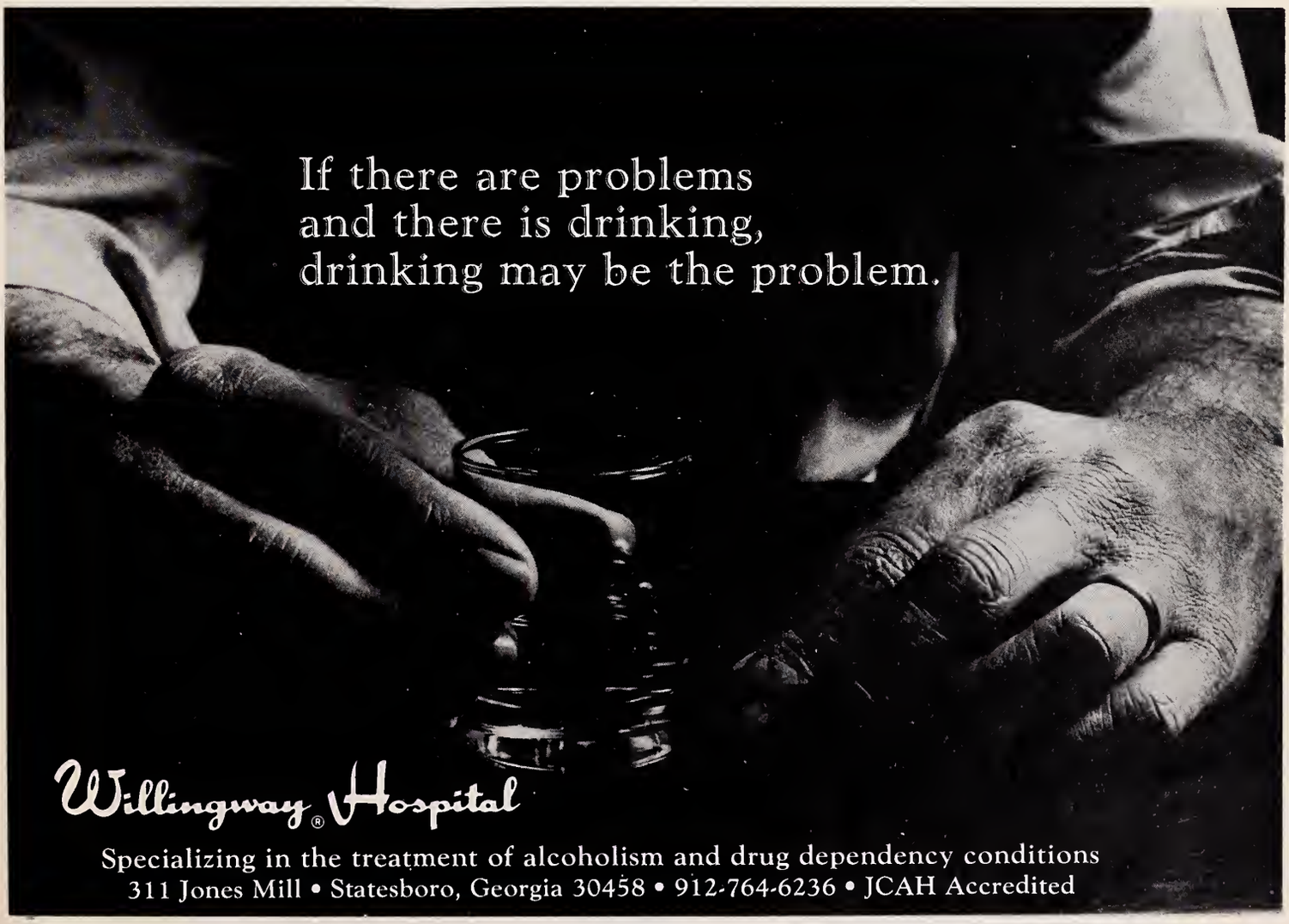
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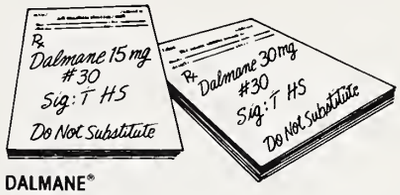
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Indicotions: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Controindicotions: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patients to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Wornings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Withdrawal symptoms rarely reported, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reoctions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosoge: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE®
Roche Products Inc.
Manati, Puerto Rico 00701

#1 FOR SLEEP

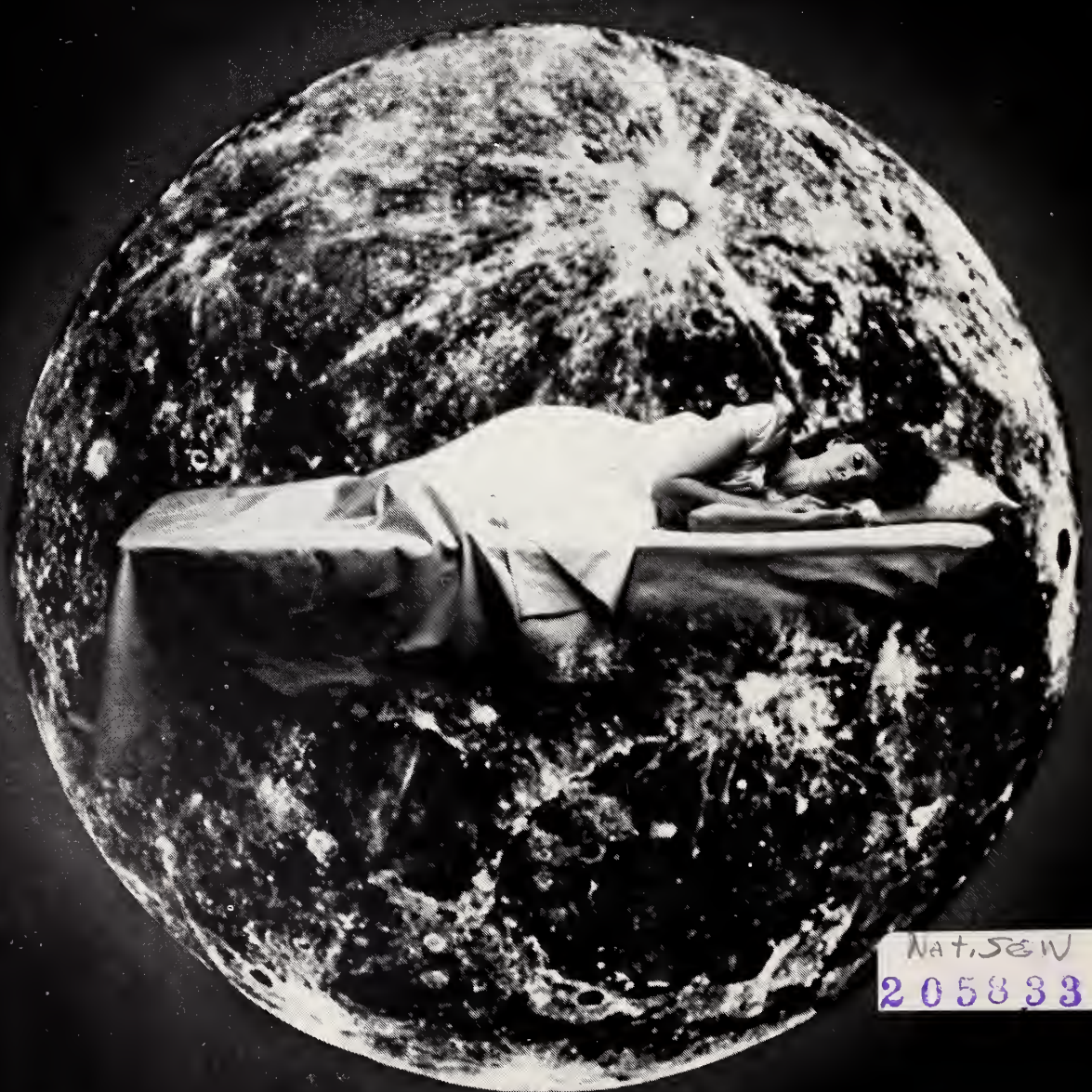
After more than 15 years of use, it's #1 for sleep that satisfies. Patients are satisfied because they fall asleep fast and stay asleep till morning.[1-8] And *you're* satisfied by the exceptionally wide margin of safety.[7-9] As always, caution patients about driving or drinking alcohol.

Please see adjacent page for references and summary of product information.

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